

August

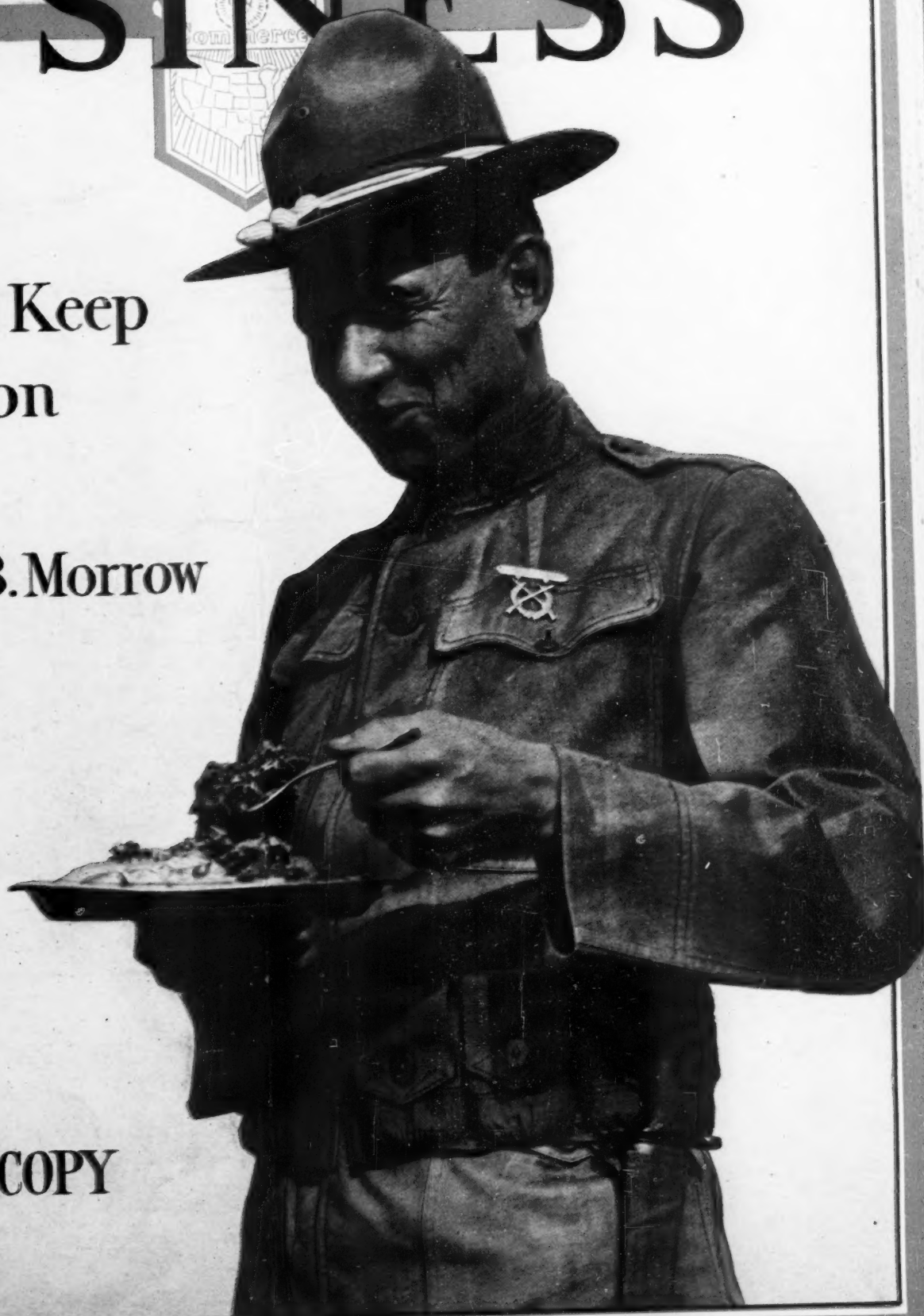
5-8

1917

# THE NATION'S BUSINESS

Board and Keep  
for a Million  
of Him

*by* James B. Morrow



20 CENTS A COPY

# COMPUTING- TABULATING- RECORDING- COMPANY

FIFTY BROAD STREET  
NEW YORK, N. Y.

*Is Comprised Of*

## COMPUTING SCALE CO. OF AMERICA

Moneyweight Scale Co.  
Computing Scale Co., Dayton  
Detroit Automatic Scale Co.  
Computing Scale Co. of Can. Ltd  
American Automatic Scale Co.

## THE TABULATING MACHINE COMPANY

## INTERNATIONAL TIME RECORDING CO. of N. Y.

INTERNATIONAL TIME  
RECORDING CO. of CAN. Ltd.

### COMPUTING SCALES HEAVY WEIGHING DEVICES

Computing Scales for accurate weighing, and for mechanically determining the selling price of the article weighed---Counting Scales for counting a mass of uniform parts---Heavy Capacity Scales for weighing huge masses---Meat Slicing Machines for the mechanically graduated slicing of meats---and Cheese Cutters for cutting cheese to desired weights. The widespread use of these machines is evidence of the importance of accurate weighing and measuring of materials in store and factory.

### HOLLERITH ELECTRIC TABULATING MACHINES

A system of machines which bring to the business of the World a method of taking the details of a business, and by mechanical analysis, comparison and compilation formulates these details into facts which may be used in determining business policies. The Hollerith Tabulator, Sorter and Key Punch together with the Hollerith Card, bring to the businesses of the country a reading glass under which they can study every detail of the business and use these details in its future direction.

### TIME AND COST RECORDING DEVICES

Card, Dial, Autograph and Key Time Recorders for recording the arrivals and departures of employees---Cost Recorders, Elapsed Time Machines and Time Stamps for determining manufacturing costs---Electric time systems for factories, hotels, public buildings, etc.---Recording Door Locks for recording door movements---Program Devices for announcing work periods, daily schedules, etc. ---and Coasting Recorders for recording amount of coasting done by traction vehicles.

**A BUSINESS FOUNDED UPON THE PROFIT  
IT MAKES FOR ITS USERS**

*Offices in all Principal Cities of the World*





## STATEMENT OF CONDITION, JUNE 30th, 1917

ASSETS		LIABILITIES	
<b>Immediately Available</b>		Capital - - - - -	\$4,000,000.00
Cash in Vault - - - -	\$ 5,294,468.31	Surplus - - - - -	3,000,000.00
With Federal Reserve Bank	15,068,438.35	Profits - - - - -	1,414,106.60
	\$20,362,906.66	Discount collected but not earned - - -	463,613.75
Exchanges for Clearing House - - - -	6,616,433.77	Circulating notes - - - - -	640,000.00
With Correspondents and Loans at Sharp Call - - - - -	27,288,722.78	Acceptances by this bank	
Eligible for re-discount with Federal Reserve Bank - - - - -	27,948,046.80	(less \$861,620.95 held	
	\$82,216,110.01	by bank) - - - - -	\$3,909,580.53
<b>Other Loans and Discounts</b>		Acceptances by corre-	
Due within 30 days - - -	\$ 6,102,951.69	spondents for this bank's	
Due 30 to 90 days - - -	4,637,514.73	account - - - - -	985,504.97
Due 90 to 180 days - - -	14,863,172.31		4,895,085.50
Due after 180 days - - -	784,593.31		
	26,388,232.04	Bonds borrowed - - - - -	100,000.00
Short-time Securities - -	\$2,320,200.58	Deposits - - - - -	106,644,615.35
United States and other bonds - - - - -	4,929,596.10		
	7,259,796.68		
Customers' liability for acceptances by this bank and its correspondents (anticipated \$463,423.98) - - - - -	5,293,282.47		
		<b>TOTAL</b>	<b>\$121,157,421.20</b>
	<b>TOTAL</b>		
	<b>\$121,157,421.20</b>		

## IRVING NATIONAL BANK

WOOLWORTH BLDG.

Strictly a Commercial Bank

NEW YORK

## Some of the Good Things COMING in SEPTEMBER

Thrift that Will Win the War..... THOMAS W. LAMONT  
Food Control..... DR. CHARLES R. VAN HISE  
Wanted: A P. D. Armour for Our Fish..... WILLIAM C. REDFIELD  
Moving Goods in War-time—It Must be Done.. EDWARD HUNGERFORD  
The Mobilization of our Railways..... JAMES M. BINKLEY  
Can We Fix Prices?..... ANSELM CHOMEL  
Coal—An Interview with Francis S. Peabody..... LAIRD STERLING  
Who is Hurley?..... JAMES B. MORROW

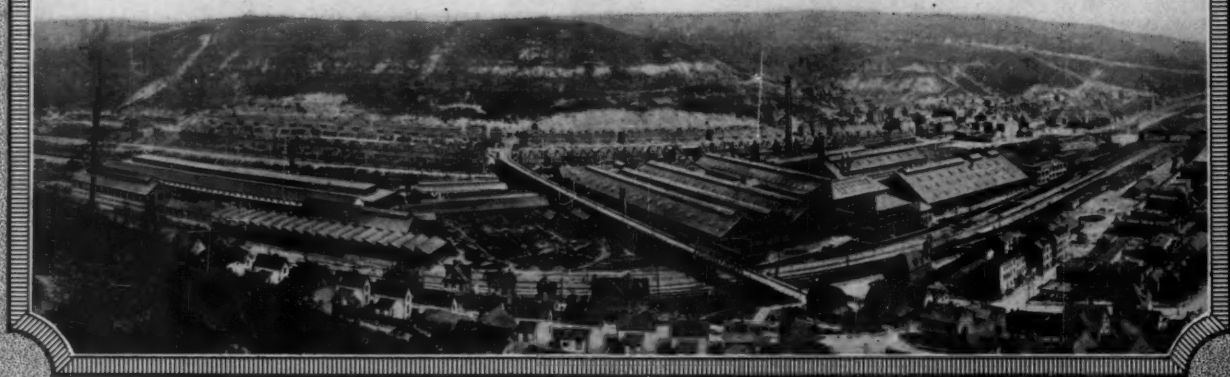
If you think well of The Nation's Business and wish to do yourself, ourselves and five friends a good turn, send us their names and fifty cents and we will send each the September number with your compliments; or send us the name of one friend with fifty cents and we will send him this unusual business magazine for three months.

"I didn't know there were as many new ideas under the sun as you have introduced in giving zest and fascination to business subjects."—James Schermerhorn, publisher of the Detroit Times. Perhaps this is why 1,240 high grade executives subscribed for The Nation's Business during July.

## The Nation's Business

Riggs Building  
Washington, D. C.

The Home of the Air Brake



## Our Part in the War

America is at war. From a peaceful neutral she has been forced to become an active belligerent with grave responsibilities,

fully realized, and with clearly defined duties to perform in this great World War.

Adequate railroad traffic movement is essential to National life in time of Peace—and vital in War.

The Air Brake controls the railroad train movement of the Nation and is one of Transportation's prime factors.

Until the Government directs otherwise, our "bit" will be to faithfully co-operate with railroad men to the limit of our ability in

promoting safe and efficient train movement and every possible enlargement of traffic carrying capacity.

# Westinghouse Air Brake Co.

General Offices and Works: Wilmerding, Pa.

Branch Offices in all Principal Cities

### Associated Companies:

Westinghouse Brake Company, Ltd.  
London, England

Compagnie des Freins Westinghouse  
Sevran, France

Societe Anonyme Westinghouse  
Petrograd, Russia

Canadian Westinghouse Company  
Hamilton, Ont., Canada

Compagnia Italiana Westinghouse dei Freni  
Torino, Italy

Westinghouse Brake Co. of Australasia  
Concord West, New South Wales, Australia



## LEADING ARTICLES IN THIS ISSUE

### Cover Design

Photographed especially for The Nation's Business by  
Underwood & Underwood ©

Wings for Our War Eagles Captain Earl Hamilton Smith, O. R. C.	5
The Men Behind the Army and Navy.....George Farley	8
Board and Keep for a Million Soldiers....James B. Morrow	11
The Road to Industrial Peace.....Dr. Charles W. Eliot	14
Looking Back at the Liberty Loan.....A. D. Welton	18
Beans.....James M. Binkley Illustrated by R. L. Lambdin	20
Mars on the Line.....H. M. Baily	23
A Monthly Survey of The Nation's Business Archer Wall Douglas	26
Leading the Way in War's Confusion.....Howard Strong	28
The Case for the Trade Acceptance.....Lewis E. Pierson Decorations by Charles E. Howell	30
Some Welcome Trade Casualties.....Anselm Chomel	32
Another Viewpoint, Verse.....Strickland Gillilan	34
Triumphant Cotton.....Aaron Hardy Ulm	35
Our Congressional Record.....	38
Commerce in the Month's News.....	42

Heroism: Sometimes It Is to Stick to One's Job

The Bean a Patrician Is

Suez and Panama in War-time

Foreign Banking a Habit

Foreign Exchange up Front

Hay Declines to Abdicate

A Squint at Our Resources

Controllers the Thing in England

Cost Plus Not a Stranger

Business Books Getting Thumbed

Congress and the Business of War.....	45
Contraband of War.....	47

Entered as second-class matter February 18, 1913, at the Postoffice at Washington, D. C., under act of March 3, 1879

## It's All In The Day's Work



**I**T'S all in the day's work" said a young American soldier just before he sailed for "Somewhere in France."

That man was right. The winning of the present great war is "*all in the day's work*", or rather in the results obtained during each day's work of that army behind the army which in modern war is an army in itself.

Little doubt there is in any of our minds of America's ability, both commercial and industrial, to carry off the situation. On the other hand, we all of us feel that the country has a full day's work before it.

Now here is a fair question. What is a full day's work? In other words, how can we best get the greatest results from each day's labor? The answer—through *organized production*, for experience has proved that organized production means *greater production at lower cost*.

To American manufacturing concerns, who because they realize we have "a full day's work ahead of us", realize the more that time, labor and material must be utilized to the fullest extent in the wisest manner, we offer the services of this organization of industrial engineers.

A harmonious group of industrial specialists, experienced engineers, production men, accountants and general organizers. A group of men whose aim—an aim successfully realized in work performed—is the locating and elimination of those factors which tend to decrease output and increase expense.

An organization which secures such results with the least possible change in existing conditions and without internal friction.

The record of Mr. G. Charter Harrison in the successful solution of problems of equipment, operation, method and policy, covers eighteen years of service rendered premier concerns. His services bear their strong endorsement both for results obtained, and for co-operation with existing organizations, a principle which is ever pre-eminent in the work of this group of industrial engineers.

Names of former clients, and detail information will be gladly furnished all who desire to secure full results from the "full day's work" that our country has before it.



**Baker, Sutton & Harrison**

INDUSTRIAL ENGINEERS

31 Nassau Street New York



Chauncey Avenue, New Rochelle, N. Y.  
Constructed with "Tarvia-X," 1915.

## How Good Roads Reduce the Cost of Living

**G**OOD roads are like oil in machinery—they reduce friction-resistance.

Without good roads a community rusts—sticks—stagnates.

With good roads—the wheels of industry spin and produce.

Good roads multiply the earning power and value of remote farms. They bring a new flood of produce to the freight-station. They increase the community's buying power and make for prosperity.

Bad roads add to the cost of every ton that drags its weary way over them, while good roads set the farm-wagon, automobile and motor-truck rolling smoothly to market.

Government statistics prove that the people of backward counties often waste, in a few years, in excessive hauling costs, money enough to build a big system of modern roads.

Good roads used to be expensive to construct and keep up. Today they are not.

Built and maintained with Tarvia, modern roads are made automobile-proof, frost-proof and durable.

Over a period of years Tarvia Roads are *less costly than any other form of good-road construction.*

They are a delight to owners of horse-drawn vehicles and motor-cars alike. They give horses perfect traction.

Many of the streets and parkways of New York, Chicago, Boston, and a thousand smaller towns have Tarvia roads because they give adequate service at low cost.

A system of Tarvia roads in your community will do much to increase its prosperity and reduce the high cost of living.

*Send for illustrated booklet showing towns all over the country that are using Tarvia successfully.*

### Special Service Department

In order to bring the facts before taxpayers as well as road authorities, The Barrett Company has organized a Special Service Department, which keeps up to the minute on all road problems.

If you will write to nearest office regarding road

conditions or problems in your vicinity, the matter will have the prompt attention of experienced engineers. This service is free for the asking.

If you want *better roads and lower taxes*, this Department can greatly assist you.

New York Chicago Philadelphia  
Cleveland Cincinnati Pittsburgh  
Kansas City Minneapolis Nashville

The **Barrett** Company

Boston St. Louis  
Detroit Birmingham  
Salt Lake City Seattle Peoria



THE PATERSON MANUFACTURING COMPANY, Limited: Montreal Toronto Winnipeg Vancouver St. John, N. B. Halifax, N. S.  
Sydney, N. S.



# The Nation's Business

VOLUME 5, NUMBER 8

A Magazine for



Business Men

WASHINGTON, AUGUST, 1917

## WINGS FOR OUR WAR EAGLES

A Billion Dollar Industry Must Be Built in a Year to Insure Victory in the Clouds by Producing Thousands of Battleplanes and Trained Fighters

By **CAPTAIN EARL HAMILTON SMITH, O.R.C.**

*Secretary of the National Aerial Coast Patrol*

*Commission*



**T**O win the war in the air" American industries must perform five big feats which have never been accomplished before by any nation. The passage of the \$640,000,000 aviation bill by the House on the 14th and by the Senate on the 21st of July was merely an announcement to the business men of this country that yet another immense war task—and an entirely new one at that—had been thrust upon them. They must toil to do these things:

Successfully develop a new billion dollar industry within a year and be prepared to keep it going indefinitely;

Lay the foundation in one year of a mammoth aircraft production which will equal what France and Great Britain have taken three years to do;

Attain quality as well as quantity production by machinery of exceedingly delicate aeroplane motors, equal to those now being made only by the most skillful hand labor in France, Great Britain and Italy;

Furnish 75,000,000 feet of aeroplane spruce by a kiln dry process equal to air dried spruce, which has never been done before;

Do all of this without seriously dislocating normal business or interfering to any serious degree with any other phase of vital war activity.

Can such unheard of things be done?

Leaders of American business, already bearing the strain of enormous war tasks, declare emphatically that they can. Brigadier General George O. Squier, Chief Signal Officer of the Army, says without hesitation "Young America will fly and win for freedom." The serene confidence of Hon. Howard E. Coffin, Chairman of the

Swarms of American war 'planes are to be built without disrupting other necessary work. It is hoped that by spring we will have more than 5,000 machines in Europe, and by the 1919 campaign we should have 30,000 at the front. In three years France and England have turned out 40,000 aeroplanes. They have on hand now about half that number.

Aircraft<sup>1</sup> Production Board of the Council of National Defense, is appalling. He simply declares "The whole project is one worthy of America's capacity and energy." And then he calmly keeps on with the work of making this come true!

After all, it is the spirit that counts. Battles and wars are won not merely by billions of dollars and millions of men. Back of this must be what Napoleon used to call "the imponderables," meaning the indefinable qualities such as faith and courage and exaltation of purpose. These attributes abound in the aeronautical crusade, as much outside the Government as in it, and the creed of the business men of this country who are banding together to perform five hitherto impossible feats within a year was set forth recently by the Aircraft Production Board—themselves typical American business men—in the following statement:

"All world's records for industrial development of a new art must be broken. But the whole task is one of



© UNDERWOOD & UNDERWOOD

These cheerful young college men are part of the thousands who went into training without waiting to see what Congress was going to do with aircraft legislation. One hundred thousand men—more than our regular army before the war—will be required for the air force. One tenth of these will be fliers.

industrial organization for quantity production, and in this we Americans are above all other nations fitted by experience and tradition to break world's records."

The Government's aeronautical program calls for the rushed construction of 22,000 aeroplanes, school machines and battleplanes, and 49,000 aeroplane motors. It also requires the creation of a specially trained personnel of over 100,000 officers and men, of whom 10,000 are to be fliers. This last, however, is a separate task to be handled by the War Department and its Signal Corps. It is a tremendous and dangerous problem in itself which cannot be treated here. We may rest assured that it will keep pace with the expected achievements of the industrial side of a project which involves the honor and the safety of our country.

Attention is also called to the fact that perhaps not more than half of the \$640,000,000 appropriated for the aeronautical program, as well as the \$54,000,000 additional set aside for the aviation service last month in the \$3,300,000,000 war budget, will be expended on aeroplanes and the necessary accessories. The balance will be needed for the purchase of training fields averaging a mile square, erection of buildings and upkeep of the personnel, which will ultimately be greater than the United States Army within the continental limits of the country was at the time of the Columbus raid. This will also involve, after a few months, the maintenance of about 12,000 different and distinct items in stock for issuance to the service, according to the figures given to the Government by the British authorities in an exhaustive survey of famous Canadian training stations which the British Government maintains at Camp Borden, Ontario.

Another outstanding feature of vital industrial importance to the business world is the fact that the automobile industry will handle from one-half to two-thirds of the building program from top to bottom. It will have to turn out most of the engines. It will have to manufacture a considerable percentage of the bodies, for battleplanes as well as for training machines. It will also make several

thousand propellers, which applies particularly, it is said, to motor car companies which have specialized successfully in the past on limousine bodies.

There has been considerable criticism of this part of the program already, and doubtless there will be more in the future. Nevertheless, the firm conclusion of the Aircraft Production Board and of high Government officials is that the automobile industry is by far the best equipped to be converted into an effective nucleus for the new business. This is said to be so because of the world's record it has made in the production and standardization of motor cars and engines, inasmuch as there are over 3,500,000 motor cars in this country and less than 1,000,000 in all of the rest of the world put together. There is also cited the ability of these huge concerns to act collectively in raising without delay the many millions of dollars which will be necessary.

For a time a genuine fear was felt by the eight or ten American aeroplane companies that the entrance of the automobile industry into the equation might put them out of business. This would have been a cruel fate for pioneer organizations who have struggled along for years wholly on their own slender resources and without the substantial support which they had a right to expect from their Government, and which they did not get until the appropriation in August, 1916 of \$18,000,000 for Army and Navy aeronautics.

It is evident now, however, that these aeroplane companies will have to double and treble their plants to handle the increased business which they are qualified to take care of, and it is expected that there will also be plenty of orders for all new companies which can show sound financing, proper facilities and skilled personnel. It is thought that the new companies, when they are properly organized and up to standard, at first will be given orders for spare parts. This in itself will amount to a volume of business totalling \$50,000,000 (this figure is necessarily approximate), to supply the heavy and unavoidable wastage in the British and French and Italian air services.



There is given herewith a brief elaboration of the manner in which our American industries are expected to make good in a big way on five counts.

The air program will be a billion-dollar proposition within a year for the reason that the money already appropriated will not be enough. The total amounts to-day are \$694,000,000, as previously mentioned. There will also be the \$100,000,000 which the Navy Department has just asked at the eleventh hour, plus the \$11,000,000 it already has. The Navy side, however, is another story altogether. The Army budget of nearly \$700,000,000 will all be spent or contracted for by August 1, 1918, and the net result by the opening of the Spring campaign may not be as many as 5,000 American battle-planes actually in the war zone, in addition to a large number of training machines. Thus, this huge sum, and easily \$300,000,000 more, when made available, will merely lay the foundation for our much talked of campaign to "win the war in the air."

This foundation work, nevertheless, is all important, and the situation at present gives promise that never has money been better spent. As a result, if the carefully laid plans work out, the United States will be turning out 3,000 aeroplanes a month by a year from now, which means that we should have 30,000 in the war zone when the 1919 campaign opens. This, of course, will mean the expenditure of another billion. France and Great Britain, after three years of war, have not turned out more than 40,000 machines of all kinds, good, bad, and indifferent, and they are understood to have on hand about 20,000, including school machines, both slow and fast, as well as fast fighting planes, patrol scouts and heavy bombers. It is understood that France and Great Britain combined have just begun to hope for quantity production equal to the 30,000 machines per year which we are expected to begin to attain within one year.

It is believed that our air program will be carried out with a minimum of business dislocation and interference with other war work. The only serious slump looked for is in the production of pleasure motor cars, and this will not be a hardship. The American people have plenty of them and will have to get along. In fact, it wouldn't hurt them if they had to do a whole lot more walking than they do.

The Aircraft Production Board has been advised that the production of motor trucks for commercial and military purposes will not be hampered. No dislocation whatever of this field of motordom is anticipated. Over 40,000 two and three ton trucks are to be manufactured for the Quartermaster Corps of the Army, and this is a war measure which another war measure will not be permitted to delay. It is believed at this time that the aeronautical program can be handled by the automobile industry without the necessity of invading the motor truck field.

Cylinders are to be turned out by the present munition plants, and the General Munitions Board has officially declared that it can be done, and is expected to be done, without reducing the outputs of munitions by so much as a single shell.

Cash register, sewing machine and typewriter compa-

nies are to turn out the small metal parts. This also is to be accomplished, according to the Aircraft Production Board's estimate, based on statistical reports from all the leading companies in these lines, without interfering with the greatly augmented production of typewriters, sewing machines, cash registers, etc., which are imperative for war purposes.

Furniture factories and wood working companies of all kinds will fashion propellers, for which nearly 3,000,000 feet of mahogany and black walnut will be needed.

Great Britain most likely will continue to furnish the linen at the rate of 175 square yards per aeroplane, or 3,850,000 yards for the entire 22,000 American planes provided for the time being.

In this connection, it is reassuring to know that every estimate of industrial capacity, stocks on hand, stocks in sight, and the like, is based on comprehensive statistical surveys made by or for the Council of National Defense and the Aircraft Production. Some industries, the automobile for instance, have been

subjected to a second industrial survey.

Quality as well as quantity production of the motors is asserted to be assured, in spite of the fact that the exquisite and wonderful aeroplane engines manufactured abroad are done by skilled hand labor. It is asserted with absolute confidence by the Aircraft Production Board that the motor car companies will be able to turn just as good engines by machinery as Europe has produced by hand. These concerns will make a standardized United States aeroplane engine, which is being perfected now, and is based on the net planning of over 50 government scientists and distinguished motor engineers. Well known motors will also be produced in large quantities, it is hoped, such as the Gnome, Rolls-Royce, Curtiss, Hall-Scott, Hispano-Suiza and the Thomas. This promises to be the knottiest problem of all, and if it succeeds American motor car circles will have hung up a record more than in keeping with their traditions for spectacular successes.

An achievement almost as important is predicted in the matter of kiln drying for spruce for the aeroplanes. Heretofore no one would think of putting anything but air-dried spruce into aeroplanes, but it is no secret in official circles that a process of kiln drying for spruce has already been perfected. If this comes up to expectations, which it should, then one of the greatest obstacles to the development of aeronautics since the Wrights made their first flight will have been made. It will be second in an industrial sense only to the forthcoming attempt to attain quality results by machinery in the development of aeroplane engines. Of the 75,000,000 spruce which must be cut, dried and put to use in aeroplane bodies, two-thirds will go to our Allied birdmen. For each aeroplane 1,000 feet of spruce are needed, of which 200 actually go into the machine. The other 800 feet have gone to waste or been used afterward on packing boxes and for miscellaneous purposes. The spruce interests are planning ways of putting a very great portion of this wastage to good use.

In conclusion, it would be well for the country not to be carried away in its enthusiasm. A billion dollar

---

**I**N ordering trucks and most of its other army requirements, the government had merely to ask for increased production from industries already established on a vast scale. The aeroplane fleet presented a far more difficult problem. It became necessary to start from almost nothing and produce within a year a billion dollar industry—as a magician produces a rabbit from a hat. It has to be done with a machine whose building and operation is a fine art. It has to be done without crippling other war work by the withdrawal of money or highly trained workmen. It has to be done with the realization that peace may stop activities. The solution is at hand. Makers of pleasure automobiles will contribute much of the skilled labor. Plants devoted to small and intricate machines will help with parts. Woodworking plants will work on frames and propellers. And the bottomless pockets of Uncle Sam will furnish the money.

---



job is a mammoth job, whether the goods to be fashioned are hair pins or aeroplanes. Being aeroplanes, with the certainty of lives being needlessly sacrificed if weak or imperfect machines are given to our men at the front and in the training camps, the job before the industries of the country becomes doubly difficult and momentous. From four to six months will be required for our factories to

adapt themselves to the new situation to the point of beginning to attain the proper ratio of production.

But commercial profits are not merely the goal this time. Victory hangs in the balance. Even our national existence may be wrapped up in the undertaking. The exceedingly valuable preliminary work already done in the past three months and the spirit behind it all—the "imponderables"—point straight toward success.

## The Men Behind the What Direction for the One Army and Navy Hundred Million of Us in Mine, Field and Factory, on Ship and Rail, while Two Million Face the Hun?

By **GEORGE FARLEY**

**T**HE creation of a War Industries Board, with the approval of the President, supplied an important piece of machinery omitted when our governmental plant for the prosecution of the war was built.

That piece of machinery was an organization with authority to formulate and make effective general policies. We had all the members of a war body without a head. We had departments and commissions and boards to do particular things, but there was, apparently, none whose business it was to coordinate the work of all of them.

The National Chamber of Commerce Committee on Cooperation with the Council of National Defense had called attention to the need for such a board. Hence this, the newest of our war machinery, may be said to be, in part at least, one of the contributions of organized business to the nation.

Study of the methods of procuring materials and supplies for our armies and those of our allies convinced the committee, of which Waddill Catchings is chairman, that a board was needed which could reach decisions on many problems other than military, settle differences of judgment, stop debate, and take decisive action. A board which could lay broad governmental plans and undertake the solution of problems affecting all branches of the government involved in the war. A board which could receive and carry out instructions from the President and the Cabinet and coordinate all efforts toward procuring materials and supplies.

That is what the sponsors for the board expect it to be. According to an official announcement, it will have general supervision over the war industrial activities of the nation. While it does not come into existence as the result of legislation, it is understood that there are agreements which will confer upon it all needed authority. It will, at least, lodge responsibility for effective action as definitely as is possible under existing law.

**T**HE new board will assist the departments engaged in making war purchases. It will work under the direction and control of the Council of National Defense, and will be responsible through it to the President. In addition to other duties, it will assume those formerly discharged by the General Munitions Board. It will act as a clearing house for the industrial needs of the government, determine the most effective means of meeting them, the best methods of increasing production, including the creation or extension of industries, and the sequence and relative urgency of the wants of the different government services. It will consider price factors, the industrial and labor aspects of problems involved, and general questions affecting purchase of commodities. It will, however, not interfere with the operations of the Council of National Defense, the Advisory Commission and the committee subordinate to the Council.

The chairman of the board, F. A. Scott, a prominent

business man of Cleveland, who has been chairman of the General Munitions Board, is known as an authority on the production of munitions. The other members are Lieut. Col. Palmer E. Pierce, attached to the War College division of the General Staff, representing the Army; Rear Admiral Frank F. Fletcher, who was in command of the United States fleet at the American occupation of Vera Cruz, representing the Navy; Hugh Frayne, one of the chief organizers of the American Federation of Labor, representing labor; Bernard M. Baruch, financier, who has been chairman of the Committee on Materials of the Council of National Defense; Robert S. Brookings, a St. Louis merchant, who has a wide reputation in the business world, and in educational circles, and Judge Robert S. Lovett, chairman of the executive committee of the Union Pacific Railway.

Mr. Baruch will devote his attention particularly to raw materials, Mr. Brookings to finished products, and Judge Lovett to matters of priority.

**B**UT, after all, was there real necessity for a new war board? Why pile commission upon commission? Are we to become committee-ridden, as England has become since the outbreak of war?

Those questions were anticipated by Mr. Catchings when, as chairman of the National Chamber's committee, he set forth the following reasons why we should have this additional organization:

In suddenly undertaking any great enterprise, confusion is inevitable while the main problems are making themselves clear. In our case, these problems are beginning to stand out in their true proportions; we see what is to be our part in the conflict.

To the machinery of government as developed in time of peace we have added the Council of National Defense, the Shipping Board, the Food Control organization, the Exports Council, and so on—all acting independently of each other.

The Council of National Defense, from its name, might be taken to be the channel through which concentrated effort is to be developed. Its function, however, is limited by law to investigation, reporting and making recommendations.

As an example of the work awaiting a general board, in the solution of problems and the adoption of policies, consider the coal situation.

When quotations on coal for the navy were requested, a price of \$2.95 was submitted on coal that was then selling at \$4.00 or \$5.00 per ton. Not satisfied with that price, the Secretary of the Navy commandeered the coal needed at \$2.33½ per ton. The public, however, was still charged \$4.00 and \$5.00 and even more. Coal operators, it was felt, were making enormous profits at a time of great national sacrifice and suffering.

To meet that situation, the Coal Committee of the



Council of National Defense called a meeting of all bituminous operators. As a result of the conference, the operators agreed to have prices determined on a basis of cost plus a fair profit after a government investigation. And pending that determination, they agreed not to charge the public more than \$3.00 per ton.

Then the Secretary of War, as President of the Council of National Defense, wrote a letter criticising this agreement and the action of the committee and operators. The full bearing of the letter upon the operations of the Council and its committees is not clear; all that can be said is that the situation is unsettled.

SIX other reasons why a war board with power to act should be created were set forth in the following discussion by Mr. Catchings of some of the problems awaiting solution:

In the first place, there is the question of the price the government is to pay for materials and supplies where the demand is so much greater than the supply that reliance can no longer be had upon the equilibrium of supply and demand to determine a fair price. Famine prices prevail for many materials. No general plan has been developed to meet this condition.

An important phase of the price situation is that, when the government fails to arrive at a satisfactory price, the furnishing of supplies is delayed. For example, steel needed for ships has not been purchased for this reason.

A problem of equal importance is that no mechanism yet exists for deciding who shall receive materials when the supply is insufficient for all. To-day, when so much depends upon additional cars and locomotives for the railroads, there are serious interruptions in operations of car and loco of steel shortage. Meanwhile, ship orders as they may enter. The great question of

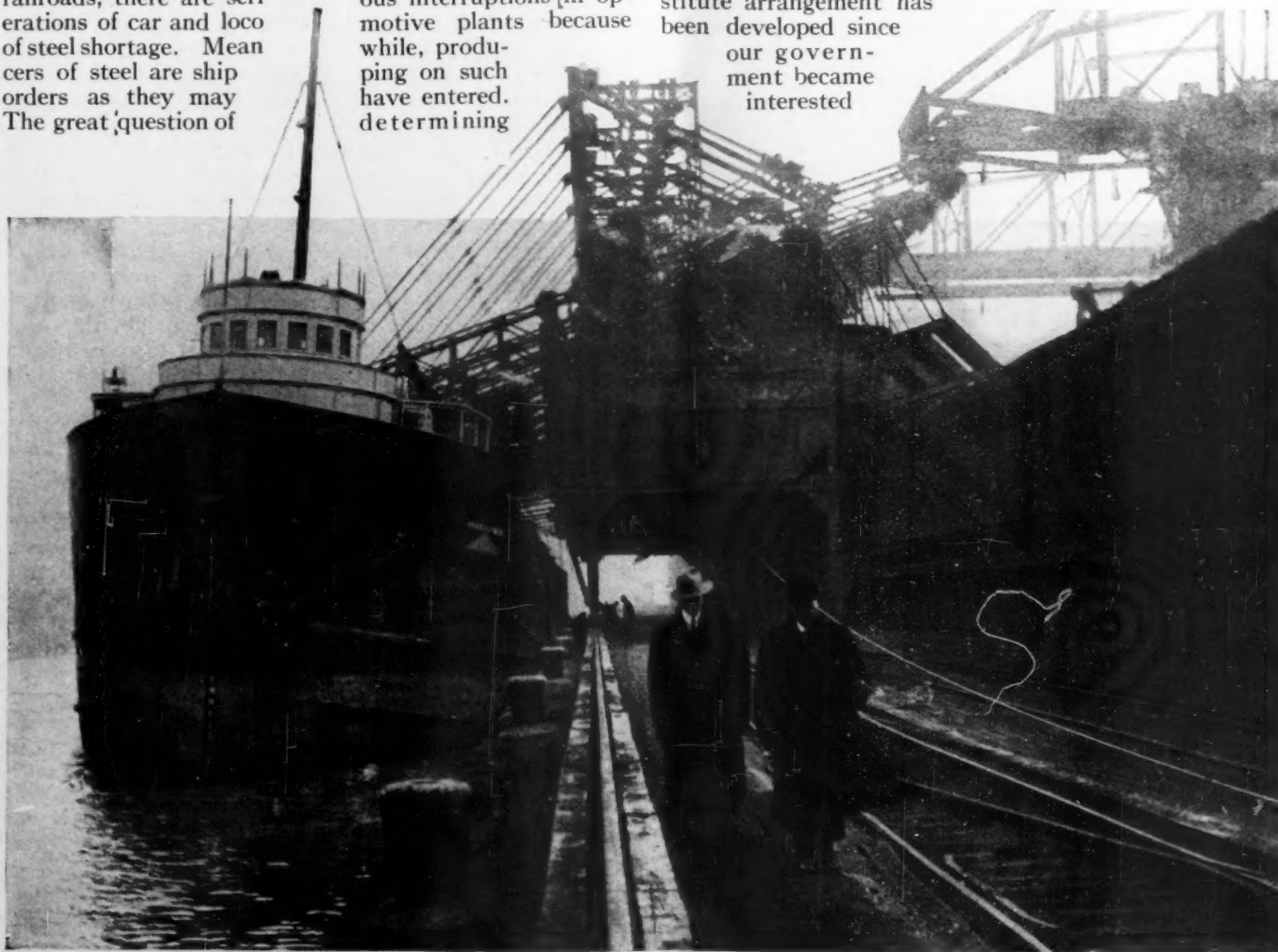
which industries must suffer, and which must secure materials where there is a shortage, remains to be attacked. Distribution of even the most limited and essential materials is still made largely on the basis of the highest price offered.

Of pressing moment, also, is the need for developing new sources of supply of raw materials. In sulphuric acid an acute situation exists; likewise, with regard to toluol. There is evidently needed a broad program to develop new sources of supply without delay and to be prosecuted with the utmost vigor.

Uncertainty has existed regarding the program for building ships. Different views were held by equally important men. Nowhere short of the President could a decision be reached.

Still another problem is the close following of progress made in the fulfillment of government orders. Some departments follow up orders, but this often consists of making inquiries about the time deliveries are due. The great contracting and building companies have demonstrated the value of so-called "chasing" departments, which follow closely the progress of orders from the making of schedules to final delivery and at every stage of progress bring to bear effective pressure to prevent avoidable delay. For our government to get satisfactory deliveries, some such plan will doubtless have to be worked out for all important orders and contracts.

Purchasing in this country for our allies presents another problem. Great Britain, France, Russia, Italy and others depend upon this country for large quantities of raw materials and finished products. During the past two years these supplies were secured through well-developed purchasing agencies or commissions. No longer can this be continued, but no substitute arrangement has been developed since our government became interested



An ore carrier discharging at a Chicago dock. War is essentially a great consumer of steel. The substitution of wood and concrete wherever possible is urged as a means of helping the mills meet the necessary war demands.

in these purchases and in purchases on its own account.

The Council of National Defense, pending the working out of a general plan, has been the center of our first efforts in the war. This body of experienced men has met the practical situations as they have arisen from day to day and has rendered service of the highest value.

In the emergency which has existed, the work of the advisory committees of the Council has likewise been of great value. The members of these committees, many of them men accustomed to meet large problems, have, although acting only in an advisory capacity, worked out solution after solution for difficulties that have come up.

Despite the fact that there has been no definite general plan for the making of government purchases, these men have nevertheless reached bargains which have saved the government large sums of money. Pending a plan for priorities, important production has been expedited. Through individual effort, new sources of supply have been developed. Individual members of the Advisory Commission have likewise done much to assist in purchases for the allies.

When it is understood that there has been no general plan and no general authority, but that accomplishment has come from individuals meeting practical situations, what the advisory committees have been able to do appears really remarkable. In formulating a plan, the result of the work of the Council and its Advisory Commission will be of the highest benefit; in creating a real board of national defense these organizations will be of inestimable value as a foundation upon which to build.

**T**HE need of such a plan in meeting extraordinary conditions created by war is made manifest by the iron and steel situation, which is receiving the attention of the Chamber's committee in conjunction with the Council of National Defense. Other matters that the Committee dwells upon are contracts for army cantonments, methods of payment on government contracts, and the help which business men can render to the Commercial Economy Board.

The United States will not be able to produce enough iron and steel to supply our own needs and those of our allies and of business closely related to war. Therefore, warns the Council of National Defense, do not use iron and steel unless absolutely necessary. Substitute brick wood and concrete wherever possible. Postpone, unless imperative, construction and development work requiring the use of steel.

The iron and steel situation, directly or indirectly, affects all business, and business policy, therefore, should be formulated with war conditions in these industries constantly in view.

Steel for ships, steel for railroad cars and locomotives, steel for rails, trucks, containers and so on. Steel for shells and other munitions work. The total tonnage of these requirements is far beyond what is generally supposed. Then there are the industries closely related to war, industries producing government materials and supplies, the necessities of life and materials for producing necessities of life. These require steel in enormous quantities for buildings, machinery, tools, containers. Supply all of these needs, and there will be little if any steel left for general business.

This condition will continue. On the one hand, no

substantial increase in production is anticipated. In fact, even maximum production from existing facilities cannot be expected, because transportation, labor and material conditions will interfere with the full operation of plants. On the other hand, indications are that the war requirements will continue to increase.

With no other metal—not even copper—is the situation so disturbing. Materials which can be used in substitution for steel are plentiful in comparison. Lumber may be expected to meet all requirements, and cement may be had in quantity for concrete work. While there may be delays in these cases, hopeless shortage does not exist.

Where a business uses steel as a raw material and the product is not used in connection with the war, conservative men will now plan to use some substitute, and if this cannot be done, they will doubtless arrange to curtail or even suspend operations during the war. It should be anticipated that the situation which is developing rapidly will probably make it impossible for them to secure any supply.

It seems apparent that little will be gained by contracting ahead for steel. Indications at this time are that producers of steel must soon ship their product where required in connection with the war rather than fulfill such contracts as they may have on their order books. The government, for

instance, could not tolerate interference with the construction of railroad cars and locomotives by the supplying of steel necessary for those purposes to industries producing pleasure automobiles, steel furniture and buildings for amusement purposes.

Business men will probably make their plans in the expectation that soon there will be established an order of distribution of steel and that a wild scramble to enter orders for future delivery would be futile. Failure to recognize this situation may lead to unfortunate results. In a business requiring steel, if contracts are placed for future delivery, not only for steel but for other materials, the manufacturer may find that he cannot get the steel but can get the other materials. In that case, he might find that he had on hand large quantities of materials which he could not use because of lack of steel.

The extraordinary demands upon the railroads in connection with the war, limiting as they do general transportation service, suggest to business men, in purchasing supplies, the wisdom of returning, as far as possible, to doing business locally.

No longer can a man in Illinois rely upon Pennsylvania as a dependable source of supply for raw materials and equipment. For many commodities the railroads, despite the great saving in cars which it is expected will be effected through loading cars ten per cent in excess of their marked capacity, the pooling of coal shipments and other expedients, can no longer spare equipment to bring distant points into close contact. Purchase should be made nearby wherever this can be done. The preference which must be given to shipments of iron and steel will soon make this situation of daily importance.

**C**ONTRACTS for the 16 army cantonments were awarded to general contractors on a basis of cost plus a percentage, the contracts containing clauses limiting compensation to \$250,000 on any contract. The contracts will amount to approximately \$3,500,000 each.

Overhead expenses of the contractors may not be included in costs, but must come (*Continued on page 50*)

**A**RE you planning steel construction work of any sort? If so here is information of the highest importance to the undertaking.

You should know the present serious iron and steel situation; the extent of government demands in relation to production; what private business can expect after the government is supplied; whether an increase or even maximum production can be expected; whether private firms should contract for future deliveries of steel. Policies should be formed with the understanding that iron and steel affect all business.

This article tells the man who is far from his material and equipment supply what the transportation situation is.

It informs the bidder on government contracts how long he may have to wait for his money.

It relates the adventures of private traders, who first encountered the government as a preferred rival buyer, and then as a favored customer of themselves. It tells what price concessions the government is getting and how it is modifying its requirements to fit business conditions.

Jobbers, merchants and manufacturers everywhere have a dollar-and-cents interest in the story of how the United States, bidding on an article for its fighting uniform, discovered that the country was without enough material to fill this single order, to say nothing of the demands of our other 100,000,000 people.

This service is being given the American business man by the Chamber of Commerce of the United States through its Committee on Cooperation with the Council of National Defense. A recognition of its value is found in the appointment of the Chamber's committee chairman as Assistant to the Director of the Council.



# Board and Keep for a Million Soldiers

## Unsung and Unpainted, the Quartermaster's Corps Sets About the Gigantic Task of Furnishing the Army Beans and Buildings, Shirts and Ships

By JAMES B. MORROW

**A** MILLION military boarders. Now. At a later day double that number, probably. Food for them and housing. Otherwise they would not be boarders.

Also clothing—shoes as well as trousers. Shirts, caps, underwear. And, being travelers, horses and mules, wagons and automobiles, trains and ships.

A great merchandising project. None so great heretofore in America. In the market, nations bidding loudly against one another. Part of the world hungry. Wool, making new and startling price records. With all else, sinking ships and a baffling transportation problem.

Bluntly, then, such is the task, not to name the

of courage, determination and achievement.

"Big business" began with war in this country, first under Washington and then under Grant and Sherman. The men who learned "big business" at the front in 1865,



Pierce-Arrow trucks turned out at Buffalo, doing patriotic duty with the French army. It is said that powerful carriers of this type will practically do away with wagons for military purposes. One of them will haul as much in a day as twelve army mules and three wagons—and they will do the work with less expense and less men. Our army has ordered 24,000 trucks. It is said that three times that many will be needed if the war lasts two years.

worries, of the quartermasters. Soldiers are assembling. Soldiers are marching. Cities of pine, lighted, watered, drained, are built, populated and evacuated. Armies, lean and eager, move out; multitudes to be seasoned and trained, move in.

Gleaming swords, dripping red, and heads falling downward are the popular pictures of war's grand heroics.

Unnoted is the undramatic side of war; the railroad that takes the army upon the field, to the trench's edge of fire and bayonet, and the winding train of wagons that supply the soldiers with ammunition, food and drink.

"Many can lead troops," Wellington of Waterloo said. "I can feed them." The genius of both fronts among our enemies is von Ludendorff, chief quartermaster of Germany.

"Old Sherman," exclaimed an amazed Confederate, fighting and falling back between Chattanooga and Atlanta, "carries a duplicate tunnel along with him."

Sherman ate up the country, as he swept toward the sea. The deficiency came through the "tunnel" that his quartermaster, figuratively, hauled among other gear in his wagons. Therefore, he reached the Atlantic and the last body of troops in gray melted away and blended themselves again with the farms and villages of Dixie.

The quartermaster incites no passionate flights of imagery among the poets. Artists keep him out of their paints and off their canvasses. Historians dismiss him with a page or a paragraph. Yet his is a stirring story

applied their energy and experience to the industries of a reunited nation while the men of the gleaming swords, dripping red, returned to their homes and were elected to office.

What the quartermasters of a half century ago accomplished in the days of peace that followed secession can be read in cities founded, wild regions inhabited, railroads constructed and banks, mills and factories established. They learned to buy—and business begins right there.

Production is buying, in one of its simplest forms. The man who makes a wagon, buys it, paying so much for material, so much for labor and so on. Then he sells the wagon at a profit or a loss, according to what it cost him. The art of buying, as practiced by quartermasters, has reached to-day a remarkable state of development.

For example: Lumber, hardware and labor having been bought, a building two hundred and seventeen feet long was fitted, roofed and completed in one hour and thirty minutes. With a quartermaster, during war, getting a thing ready for use expeditiously is included in his purchasing formula.

Two hundred and fourteen other large buildings, barracks for fighting men, were built in eighteen days. Closely following Pershing's army to France, went the machinery for an ice plant that will cost more than two million dollars to construct and equip and the production of which will be 500 tons a day. Everything was sent.



Not a month after, but by the next boat.

During a battle, ammunition is demanded when that on hand has been shot. At the moment; at the second, in fact. Delay, at such a crisis, would mean capture or retreat. So with their skill as buyers, expert as to the hows and wheres, quartermasters are required to use despatch and uncommon ingenuity. Shells must be at the guns. Food must overtake the men. There must be water for soldiers and animals—six gallons daily per man; ten gallons for each horse or mule.

In detail the Quartermaster Corps "is charged with the duty of providing means of transportation of every character which may be needed in the movement of troops and material of war."

"It furnishes," again to quote Colonel Lawton, Major McArthur and Major Dempsey, recognized authorities on the subject, "all public animals employed in the service of the army, the forage consumed by them, wagons and other articles necessary for their use."

Likewise, in these days, motors, heavy and light, gasoline and grease. Contracts, at the time of the writing of this article, have been made for 24,000 gas-driven military trucks, for the hauling of freight, food, cartridges, rifles and the like.

The Quartermaster Corps has up its sleeve camp and garrison equipment, barracks, storehouses and other buildings. It constructs and repairs roads, railways, and bridges; it builds and charts ships, boats, docks and wharves for military purposes. It supplies soldiers with food and clothing and pays them for their services with money out of the treasury of the United States.

**I**F it were possible for one man to perform all of the duties of the Quartermaster Corps he would have to be a railroad expert, civil engineer, ship constructor, builder, architect, food chemist, industrial chemist, accountant, textile specialist, banker, motor mechanic, electrical engineer and navigator. Also a keen judge of horses and a business man of supreme ability.

Often he is required to master a new industry almost overnight. In 1898, for example, Colonel Isaac William Littell purchased the clothing for the armies organized to fight Spain. Ordered to the duty one day, he was at his post the next. In the present war, he is building the cantonments, at a cost, possibly, of \$100,000,000, that were authorized by Congress, and is doing the work as though constructing cantonments had been his only business all through life.

Major General Henry G. Sharpe, chief quartermaster of the United States. More than a billion dollars in vouchers as payment for work and supplies will pass through the offices under him before the end of the year. The view behind him is an aeroplane photograph of Camp Wilson, at San Antonio, Tex.

Major General Henry G. Sharpe is the chief quartermaster of the United States. More than a billion dollars in vouchers, the equivalents of cash paid for things performed or purchased, will pass in 1917 through the office of which he is the head.

Three years after he graduated at West Point, young Lieutenant Sharpe, born at Kingston, N. Y., left the infantry to become a captain and a specialist in subsistence. Clothing, feeding and transporting armies are the subjects to which he has since devoted himself with industry and zeal.

Books of which he is the author are studied by military officers of foreign countries. Knowledge of war with him goes back to the twilight of history, where legends stubbornly made room for facts. "The Turks, centuries ago," he says, "were the first to estimate the allowance of the soldier's daily ration and to have their armies followed by regular trains."

The principles governing the methods of supplying an army in the field with food, clothing and ammunition have not been changed by the war in Europe. Automobiles largely have taken the places of wagons and mules. Cattle following an army, or grazing near forts and trenches, have given away to refrigerated and canned meat. Otherwise, in its larger aspects, the subsistence of a soldier to-day is about the same that it was in this country when Grant, Sherman and Sheridan were fighting Lee, Johnston and Stonewall Jackson.

"To be strong, healthy and capable of the largest measure of physical effort," Sherman wrote after the Civil War, "the soldier needs about three pounds gross of food per day and the horse or mule about twenty pounds."

Outside of fodder for horses, food for men marching or in battle, the weight remains about the same. Items, however, have been increased in number.

"In my opinion," Sherman said, "there is no better food for man than beef-cattle driven on the hoof, issued liberally, with salt, bacon and bread. Coffee, also, has become indispensable."

Dried fruits, beans, butter, rice, onions, potatoes and canned peas and tomatoes have been added to the diet of the American soldier. There are to be thirty-two

© HARRIS & EWING





cantonments, North and South, at the largest of which 40,000 men and 10,000 animals will be constantly in training for service in the war against the Huns.

The food supplied to 40,000 men for thirty days will be as follows:

Bacon.....	180,000 pounds	Cinnamon.....	1,920 cans
Flour.....	1,404,320 pounds	Cloves.....	720 cans
Hard bread.....	60,000 pounds	Ginger.....	1,440 cans
Baking powder.....	6,505 cans	Nutmegs.....	120 pounds
Beans.....	128,000 pounds	Sirup.....	12,720 gallons
Rice.....	44,000 pounds	Lemon extract.....	3,840 bottles
Tomatoes.....	77,880 cans	Vanilla extract.....	4,800 bottles
Prunes.....	30,000 pounds	Soap.....	50,400 pounds
Evaporated apples.....	14,000 pounds	Candles.....	24,000 pounds
Evaporated peaches.....	10,000 pounds	Safety matches.....	403,200 boxes
Blackberry jam.....	30,720 cans	Rock salt.....	2,000 pounds
Coffee.....	80,400 pounds	Fresh beef.....	1,200,000 pounds
Tea.....	12,000 pounds	Fresh mutton.....	75,000 pounds
Granulated sugar.....	252,000 pounds	Fresh potatoes.....	1,200,000 pounds
Evaporated milk.....	53,760 pints	Fresh onions.....	224,000 pounds
Vinegar.....	3,600 gallons	Lard.....	12,000 pounds
Cucumber pickles.....	3,000 gallons	Butter.....	40,000 pounds
Salt.....	52,000 pounds	Ice.....	6,000,000 pounds
Black pepper.....	13,000 cans		

As food will have to be provided for 1,000,000 men, the foregoing figures must be multiplied by twenty-five in order to find the quantity that the quartermasters will be required to purchase every month.

A little arithmetic will show that 1,000,000 men will daily eat 5,971 barrels of flour, or the wheat of a field nearly four miles long and almost as wide. They will consume 150,000 pounds of bacon, or the equivalent, if every hog were nothing but bacon, of 750 heads weighing 200 pounds each; ten carloads of potatoes, ten carloads of beef and a large fraction of a carload of coffee.

Horses and mules, to the number of 250,000, will be bought by the quartermasters for the thirty-two camps. The daily ration at present for a horse is fourteen pounds of hay and twelve pounds of oats. The wise and frugal mule gets the same quantity of hay but only nine pounds of grain. Each animal is allowed three and a half pounds of straw for bedding.

The daily purchases, then, will be 1,750 tons of hay, 1,312 tons of oats and 442 tons of straw, or about three trainloads of fodder for the animals at all of the camps.

In the meantime, while the soldiers have been consuming prodigious quantities of beef and wheat, immense orders for clothing will have been given to manufacturers in all parts of the country. Early in the summer contracts were made within two weeks for 3,175,000 pairs of army shoes, at a cost of more than \$5 a pair.

General Sharpe is fond of quoting Baron von der Goltz, the Prussian officer, Turkish pasha and military writer, who said: "Two or three times as much as an army needs must be supplied, if it is to be kept from want; double and treble in respect to the good quality of the provisions, double and treble of the quantity."

The policy of all quartermasters is to accumulate great stores of food. For three months, in the summer of 1864, General Sharpe says, "the daily average number of rations forwarded from Chattanooga to Sherman's army—105,000 men—was 412,000, or more than three rations for every man who was engaged in that campaign."

The weight of the rations for twelve days was twenty-three and a half pounds. The soldier besides carried a musket and sixty rounds of ammunition, as well as an overcoat or blanket. Sherman said he should also have "a shelter tent and an extra pair of pants, socks and drawers." He did not believe "in loading a soldier down too much but, including his clothing, arms and equipment, he can carry about fifty pounds without impairing his health or activity." The soldier of 1861-65 was usually a boy under the age of twenty-one. Often he was no more than seventeen.

The "iron ration" of the German army is made up of nine ounces of hard bread; seven ounces of preserved meat or bacon; three and a half ounces of vegetables and seven-eighths of an ounce of coffee—a total of one pound and ten ounces. The rations of other nations at war are of the same weight, practically.

"A ration," General Sharpe says, "is the daily allowance of food for one man and varies in composition according to the service upon which he is engaged, designated as garrison, field, travel and emergency rations."

THE Civil War ration consisted of twelve ounces of pork or bacon, or one pound and four ounces of salt or fresh beef; one pound and six ounces of soft bread or flour, or one pound of hard bread or one pound and four ounces of corn meal; also to every one hundred rations there were issued fifteen pounds of beans or peas; ten pounds of rice or hominy; ten pounds of green coffee or eight pounds of roasted coffee or one pound and eight ounces of tea; fifteen pounds of sugar; one pound and four ounces of candles; four pounds of soap, thirty pounds of potatoes, "when practicable"; one quart of molasses and four quarts of vinegar.

Desiccated potatoes or mixed vegetables could be substituted for beans, peas, rice and hominy. Sherman referred to such preserved food as "patent compounds" and said that soldiers contemptuously spoke of them as "desecrated vegetables" and "consecrated milk."

An American soldier nowadays must carry at least one field ration and also an emergency ration in a sealed can that is never opened without the order of an officer. In the Civil War, marching troops had rations for two days on their persons and rations for eight or twelve days, if they were advancing on the enemy and had left their wagon trains behind.

An army of 150,000 men, began a march against Richmond in May, 1864. Each soldier carried rations for three days in his knapsack and the same quantity in his haversack. Beef cattle were driven in the rear and slaughtered late every afternoon by butchers, when the march of the troops was done. If the wagons in the train had been placed one after another in the road, the first would have been entering Richmond just as the last was leaving Washington, 130 (Concluded on page 50)

# The Road to Industrial Peace

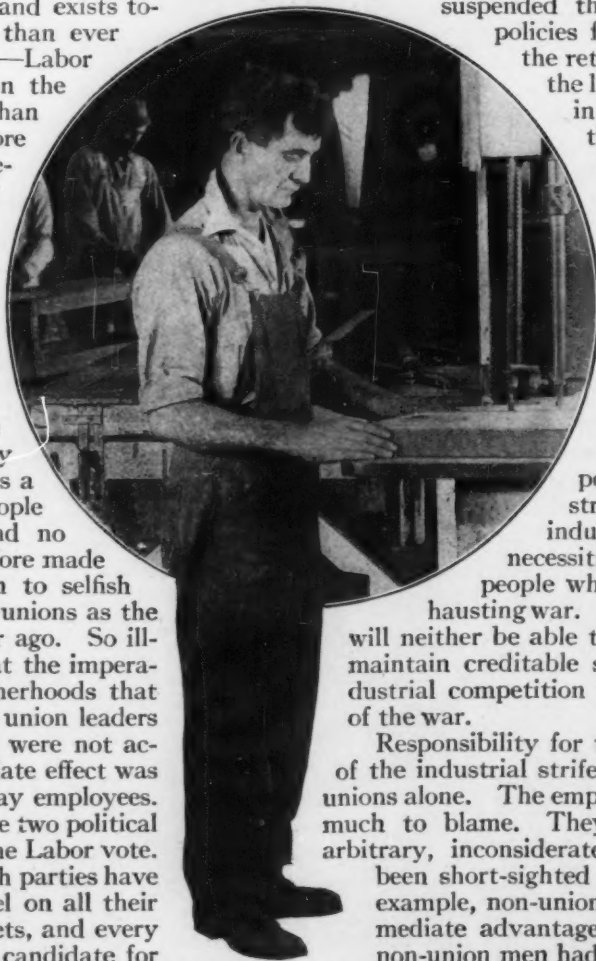
This Keen Analysis of the Relations between the Boss and His Hired Man Answers the Contention That Their Distrust of Each Other Can Never End

By DR. CHARLES W. ELIOT

*President Emeritus of Harvard University*

THE American Government and people have gone to war with Germany without having secured any mitigation of the industrial warfare which has become chronic in the country, and exists to-day in more dangerous forms than ever before. The opposing parties—Labor on the one side and Capital on the other—are better organized than ever before; so that Labor is more aggressive and Capital more resistant than they were twenty years ago, or even ten years ago. Labor has found legislatures more and more compliant to its demands; and Capital finds its means of resisting Labor more and more hampered by the action of legislatures and civil administrations. The hasty enactment by Congress of a crude law demanded by the four railway Brotherhoods in August last was a betrayal of the interests of the people as a whole. No American and no European legislature has heretofore made such a discreditable submission to selfish and insolent demands of trades unions as the American Congress made a year ago. So ill-considered was the law passed at the imperative order of the railway Brotherhoods that several of the objects which the union leaders intended to accomplish thereby were not accomplished; and its only immediate effect was to raise the wages of some railway employees. There is no difference between the two political parties in respect to fishing for the Labor vote. The campaign committees of both parties have for years printed the union label on all their letter-heads, circulars, and leaflets, and every "practical" politician who is a candidate for office does the same.

Since the country has gone to war with Germany there have been numerous strikes and threats of striking in industries which produce munitions and supplies for the army and navy and the acutely needed means of transportation by land and water; and no legislation to prevent such strikes, or even strikes in industries which produce or transport foods and fuel, has been suggested in any American legislature. In Great Britain, the stress of war has brought about temporary agreements between the Government and the labor unions concerning work in munition factories, shipyards, transportation companies, and other means of production or transportation indispensable for the efficient conduct of the war; but even these agreements have not been uniformly observed. The labor leaders agreed to abandon during the war the right to strike, and to suspend their favorite policies of closed shop and limited output; but nevertheless numerous strikes have occurred, and many workmen refuse to work steadily, because they are able at the existing high wages to support themselves and their families by working four days a week, or four days and a half, instead of five days and a half. In other words, the industrial strife is con-



tinued in Great Britain, though with some mitigations, in spite of the great sufferings of the British people at the hands of Germany. Moreover the unions have only suspended the enforcement of their habitual policies for the duration of the war. At the return of peace they mean to restore the limited output and the closed shop, in spite of the obvious fact that these policies will make it impossible to maintain British industrial productiveness at the level of the war times, however sorely it may need to be maintained in order to enable Great Britain to repair the losses of the war and to meet the new competitions of the changed commercial world. As to the American trades-unions they make no secret of their intention to maintain their restrictive and crippling policies, war or no war, and to strengthen their control of American industries by taking advantage of the necessities of the Government and the people while engaged in a critical and exhausting war. If they succeed, the United States will neither be able to carry on war effectively nor to maintain creditable standing in the international industrial competition which will set in after the close of the war.

Responsibility for the present threatening condition of the industrial strife must not be laid on the trades-unions alone. The employers or managers have also been much to blame. They have often shown themselves arbitrary, inconsiderate, and greedy; they have often been short-sighted and unintelligent; sacrificing, for example, non-union men to union men for some immediate advantage or convenience, even when the non-union men had come to their aid during a strike; they have often underrated the intelligence and character of their workmen, and so failed to confide to them their proper share in the discipline of the works; they have been quick to resent complaints on the part of their employees, and slow to deal with complaints fairly; and they have tried to keep from them all knowledge of the buying and selling departments and of the accounting. Even when employing firms and corporations have paid for a fair amount of "welfare-work", they have often done it in a patronizing or charitable way which self-respecting employees are apt to resent. Few employers have been willing to regard their relation to their employees as a genuine partnership. These errors, omissions, and sins on the part of employers are largely responsible for the acute state of the industrial warfare. Labor and Capital must divide between them the blame for the present unhappy and dangerous condition of the great manufacturing industries, but no one can say in what exact proportion.

The reasonable conclusion from these facts is that in a democracy the mass of the people cannot rely on their legislatures or their executives to protect them from the hardships which the industrial strife inflicts, especially when the



two monopolies—Labor and Capital—combine temporarily to reduce output and raise costs and therefore prices. Such combinations between Labor and Capital are never long-lived; but when these two combatants do make a truce, and combine to get and divide "all the traffic will bear," they inflict great hardships on the mass of the people. Yet the people take no effective measures to prevent such combinations, or indeed to resist the steady encroachment of the trades-unions on the rights of the people at large.

WHAT is the reason for this inaction on the part of the American people and their representatives, and on the part also of the British people and their representatives? The main reason is that a great many people in the free nations have come to the conclusion that the mere payment of weekly wages by employers, who constitute a small minority of the population, to employees, who constitute the great majority, does not afford a basis for a just and humane organization of industrial society, because it does not bring about identity of motive for fidelity and zeal in employers and employed alike, or community of interest and feeling between them. When, therefore, the employees say they are entitled to receive a larger share of the value of the product of the factory, machine-shop, mill, or mine in which they work than the weekly pay roll represents and the employer maintains that, since he takes all the risks of the business and has no certain income from it, he is entitled to all the profit there is in the years when there is a profit, high or low, since all the profit is due to his intelligence, foresight, and enterprise, many disinterested and benevolent people sympathize with the employees rather than with the employer. It is this profound dissatisfaction with the bare wage system which causes much of the unrest among the working people in the large industries of the manufacturing nations, and prevents efficient action by legislatures and courts against the wrong and injurious practices of the trades-unions. Careful observers also perceive that in the long run and large scale Capital is stronger than Labor in fight—unless interfered with by government—and therefore tend to support Labor in each special contest as "the under-dog".

Other excellent and far-seeing people have come to the conclusion that there ought to be a more even division between Labor and Capital of the proceeds of their combined efforts, and that the welfare and happiness of the entire community would be promoted by a more equitable division.

Another reason for the inaction of the great majority of the American people in seeking remedies for the industrial warfare is that they do not understand the moral and material destructiveness of some of the trades-unions' policies. They do not understand that the closed shop is an effective weapon of the labor union for the establishment of a complete monopoly of the labor in a given trade. They do not know that the policy of limited output not only interferes with individual liberty, but demoralizes every worker who puts it into practice. They do not realize that a boycott is an illegal attack on independent producers or merchants in order to compel them to submit to union rules concerning industrial production. They do not know that the union label is next to the closed shop the most effective weapon for securing to the labor union in any trade a complete monopoly.

In general, the people of a free country have a cordial hatred of monopolies, because monopolies limit their liberty in buying and selling. Americans as a rule dislike very much to find that there is only one person or organization of whom they can buy an article they want, or only one person or organization to whom they can sell what

they themselves produce. Nevertheless, neither the Americans nor the British have taken effectual means to prevent monopolies of labor in the great industries of the two countries. They see that the labor unions, since they entered about a hundred years ago upon the industrial warfare, have accomplished much good for the laboring class; that they have gradually shortened the unreasonably long hours of labor to which the laboring man formerly submitted; that they have succeeded in raising the wages of men and women who spend their lives in laborious, monotonous, or unwholesome tasks; that they have contributed to prevent the over-working, or premature working, of women and children in factories. They do not see that the present policies and efforts of the labor unions are now directed to the selfish ends of a comparatively small class; and that the organizations of Labor, natural and indeed indispensable as they are in trades as in professions, and permanently useful as they might be, are now advocating policies and cherishing aims which are not consistent with the common welfare.

OUT of this industrial strife is it possible that an enduring peace can now be brought forth? It is clear that real public happiness cannot possibly grow out of it; and yet it is the object of a democracy to promote the highest welfare and happiness of the multitude. A democracy reasonably endeavors to secure for each individual citizen liberty under law, stability of employment, the hope of improving his lot, and an active good-will of the individual toward others and of others toward him. Each of these conditions of public happiness is indispensable. Liberty is indispensable; for the love of freedom is so ingrained in modern civilized society that the abridgment of personal freedom is everywhere recognized as an obstacle to the winning of either private or public happiness. Again, a just and enjoyable social state depends on the permanent settlement of families where they can live in security and freedom, with their bread-winners earning steadily in stable occupations the means of livelihood and education. Nomad life cannot yield real social welfare in

the modern sense, no matter whether the wandering be from hunting-ground to hunting-ground, or pasture to pasture, or factory to factory.

The hope of improving one's lot is indispensable. If the social structure is built in permanent, impermeable layers, as in the feudal system, or the Indian caste system, this hope cannot spring up, or can animate only a few. And good-will is indispensable. Public happiness is impossible in a state in which employers and employed, rich and poor, educated and uneducated, are in a chronic condition of mutual distrust.

---

**TWO** men set out to do a job. One puts in land, buildings, and credit at the bank, the other contributes the work of his hands. As each gives so each receives; such is the basis of a prosperous partnership.

In effect this is Dr. Eliot's answer to the age-old question—an answer which comes out of years of sympathetic study of our industrial conditions. It is a ridiculously simple solution; in its basic elements it is nothing more than compensation to each in accordance with his contribution to the joint enterprise.

Dr. Eliot's conclusion is doubly significant now that the world's democracy is leaning so heavily on America's industrial powers.—Editor.

---

IF WE abandon all expectation of putting an end to the industrial warfare through legislation or any other political action, to what social forces can we turn in the hope of abating or mitigating the industrial strife and its unhappy consequences? Promising action in that direction is even now open alike to employers, employees, and consumers, within the permitted range of private action, and without the necessity of procuring any special aid from legislatures, courts, or governmental administrations; but the initiative in such action must be taken by the employers. It is for them to introduce into the industries which they direct the changes which would enable their employees by their skill, energy, and fidelity to attain to a reasonable moral freedom in their daily labor, to a settled home with steady work, to an expectation of improvement in their lot, to a sentiment of loyalty to the person, firm, or corporation which employs them, and to a state of good-will between

themselves and their employer. These motives and influences are strong towards developing character and winning happiness. They characterize all the higher occupations of men, such as the learned and scientific professions, the whole business of education, and the functions of the father and mother of a family. Real content in the daily labor is the object to be aimed at in all efforts for putting an end to the industrial warfare. One would suppose from the incessant efforts of the labor unions to reduce the number of working hours in the day that labor was a curse. On the contrary, willingness to labor steadily and the capacity to do so are the foundations of the superiority of civilized mankind over savage. It is the spirit in which he works steadily, and the conditions—wholesome or unwholesome—under which the earning of a livelihood is accomplished which make the difference between the happy workman and the unhappy, no matter what the occupation. A large part of the continuous education of a normal human being ought to be derived from the daily work through which he gains his livelihood. If that work is habitually done in a discontented and disloyal spirit it will have no sound educative effect, but on the contrary will degrade the worker, and dry up some of the best sources in his nature of satisfaction and happiness.

THE immediate problem before the managers of the great factory, mining, and transportation industries of the modern world is to determine how the good-will of the men and women at work can be increased. Profit-sharing is the best method of bringing to bear on the employee the same motives that govern the employer and giving him a sustained interest in his daily work. There is no single method of profit-sharing which can be used in all businesses, and the method is not applicable at all to industries which are not conducted for a profit, such as government works, public schools, hospitals, dispensaries and asylums, colleges and universities, and domestic service. Each business must have a profit-sharing method of its own, and each factory, mine, or railroad must contrive that method of profit-sharing which will best develop among its employees that good-will which is necessary to content in the kind of labor which it requires. The division of profits should come once or twice a year as a clean addition to the wages the employee has received, and the amount of the dividend should be a considerable percentage of the wages paid to each individual during the year or the six months. A percentage of five to eight per cent a year—which is usually satisfactory to owners or shareholders—will not affect operatives or mechanics strongly enough to yield all the good effects of profit-sharing. This percentage need not be steady, that is, without change from year to year. On the contrary, a percentage which varies with the success of the business—sometimes high, sometimes low—is more attractive and influential than a steady, moderate percentage. It is not necessary that all the employees of a given works should receive a profit dividend. No one ought to receive it who has not been at least a year in the service of the firm or company; and no one should receive it who has not been continuously in service during the period for which the profit dividend is declared, unless indeed he be absent on account of temporary illness. Under a successful profit-sharing system the employee will feel that he is in reality working as a partner in the business, and that his wages are merely an advance of a portion of his earnings, made to him because he cannot, like the employer, wait a year or six months for the whole of his share. Under this system, the motive of the employee for doing his best and helping to make the industry successful is precisely the same as that of the manager or owner, and from this identity of motive results a good-will which increases to a degree truly wonderful the efficiency of the establishment.

Both parties to an efficient production of salable goods

understand that the divisible profits are to be determined in the future, in the coming twelve months or six months, by faithful work on the part of all hands. The men feel that they want to do a good day's work because they are not only going to get their wages for that day's work, but they are also going to get a profit which will be large in proportion to the success of the factory as a whole.

The effect of profit-sharing by a portion of the workmen employed in a given mill or factory is very strong on the men who are not yet profit-sharers. It is the interest of all the profit-sharers that all the workers in the factory should do a good day's work; and they do their best to procure that result. They watch, stimulate, and help those members of the corps who are not yet profit-sharers. They also are interested to see that persons who are not profitable to the works be not retained in the employ; because such persons diminish the profits of the profit-sharers.

It is the interest of the profit-sharers to stop all wastes in the factory. That is a state of mind which no rise of wages without profit-sharing will ever bring about. Workmen on a profit-sharing basis will do disagreeable jobs contentedly, if assured that they are more profitable than the more agreeable jobs. Profit-sharers will also suggest to owners improvements in the methods or machinery of the business, if they think they have discovered any.

Profit-sharing cannot be successfully applied in any business or industry that is not tolerably continuous and stable, and as a rule successful. It implies on the part of the workmen confidence in the good faith, discretion, and business capacity of the manager or owner; and this confidence must be the result of the business experience and character of the manager or owner, understood and appreciated by the workmen. Profit-sharing can be applied to large numbers of employees or to small numbers, to the whole body of employees or to a part of it, and to men or to women. Some successful schemes apply only to the sales department, others only to the operatives and not to the office employees. All profit-sharers will resist what they consider unnecessary enlargements of the working force. Women profit-sharers will overwork themselves in times of stress, particularly in seasonal industries, unless restrained.

THESE advantages of profit-sharing result from permanent good qualities in civilized mankind, which can be trusted to work well universally; but profit-sharing cannot bring about with certainty good relations between employer and employed without the aid of other just and humane methods in the conduct of the business concerned. Thus, the actual working force in any industry, large or small, ought to have a share in the discipline of the works, that is, in making and enforcing the rules under which the workmen live. This "cooperative management" is easily brought about through a committee on which the managers or owners and the working force are equally represented. Ample experience in this country has already proved that complaints will be properly dealt with and adequate discipline maintained by a committee so constituted, if the head of the business be wise and fair. The workmen elect their representatives on the committee and the managers appoint their delegates. Success has often been attained when the workmen had a majority on the managing committee. The one thing essential to success in cooperative management is that both sides should feel that the cooperation is genuine, and single-minded. Again, British experience during the Great War, and much American experience as well, has proved in the amplest manner that what has been called welfare-work on behalf of the employees in factory industries is an indispensable means of procuring high efficiency in an industrial establishment, and should be steadily carried on as a business method and not a charitable one. This welfare work comprehends watchful attention to the health and safety of employees,



to the comfort and wholesomeness of their homes, to their schools, churches, play-grounds, clubs, and means of entertainment. It should include attention to the site—in town or country, city or suburb—of the mill, factory, or machine-shop, and to the physical surroundings of the works. It should include also the sub-division of a large plant into sections small enough to enable each section superintendent to have much personal contact with all the employees. In the factory industries there is no substitute for the liking of the employees for the owner, manager, or superintendent, a liking based on his personal knowledge and sympathetic treatment of them and their families; just as in military organizations there is no substitute for the attachment of the privates in a company or regiment to their immediate commander, or for the admiration and confidence that an army feels for the commander-in-chief.

**A**NOTHER adjunct of profit-sharing which develops stability, loyalty, and good-will in a working force is a pension system; but a pension system cannot be used except by a corporation or institution which has a visible durability or permanence which all people expect it to maintain. It cannot be used by a single owner or group of owners who cannot make sure of perpetuity. In solid and durable institutions like universities, government bureaus, and semi-public corporations which have long carried on successfully great transportation systems by land or sea, a good pension system has admirable effects on the continuous vitality and efficiency of a long-service staff; but there are many firms and corporations which cannot use it in support of a profit-sharing scheme.

Still another useful adjunct of profit-sharing is the sale at a reduced price of stock of the employing corporation to superintendents, foremen, salesmen and head clerks, or indeed to any competent employee who wishes to buy. The reduction in price ought to be sufficient to cover ordinary fluctuations in the price of the stock. This method is applicable, like a pension system, only in a durable and presumably profitable business not liable to heavy fluctuations in the market price of its stock. It has this inconvenience, that if the market price does drop much below the price at which the directors sold the stock to their employees, the directors may feel under obligation to buy the stock back.

None of these adjuncts to profit-sharing can bring industrial peace without the profit-sharing, that is, without the genuine partnership of Labor with Capital.

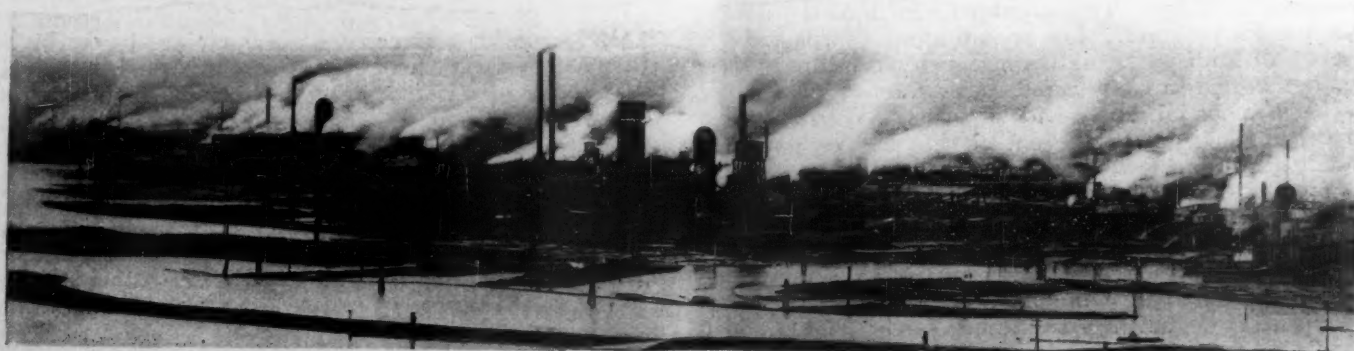
**E**MPLOYERS who are thinking of setting up an appropriate profit-sharing plan in their own business should clearly understand that the sharing of profits does not imply the sharing of losses also. Loss sharing is ordinarily impossible for wage-earners. Their savings or accumulations are insufficient; so that married men and men past the prime of life would not be justified in taking such risks for their families or for themselves. Moreover, losses in well-established businesses are usually due, not to the workmen, but to the managers, who have failed in foresight, judgment, or promptness in adapting an old business to new conditions. So far as employees are concerned, a year of loss has to be treated as a year of no

profits. An employer who really believes that every partner who shares profits must also share losses had better give up all thought of establishing a profit-sharing plan in his business.

**P**ROFIT-SHARING appeals to the best human motives, motives which build up the individual and his family, and tend to the improvement of a working-man's condition in life and that of his wife and children. On the other hand, most of the present policies of the labor unions, such as the limitation of output, the prohibition of zealous labor, the striving for a monopoly of the labor in a given trade, and the indifference to industrial wastes and losses defeat the play of good motives in human nature. Profit-sharing, with cooperative management and intelligent welfare work, is capable of bringing into play in all levels of industrial life the motives which develop humane, civilized, and improving conduct and character. It gives play to the motive of loyalty without which it is difficult to conceive how anybody can work happily. Finally, it affords the best possible means of promoting good-will between employers and employed; and the promotion of that good-will is the only fundamental way to cure the industrial warfare, just as the promotion of good-will among nations is the ultimate means of preventing international warfare. Profit-sharing prompts men to steady industry, and to fidelity and loyalty in work by appealing primarily to love of gain, but also to wholesome ambition and family love. These are the leading motives of civilized life.

**T**HE owners of a business who should adopt profit-sharing with cooperative management, welfare work, and a pension system would have to look forward to their operatives getting a larger share of the profits of the business than they now receive on a plain wage system; but it does not follow that the owners' profits would shrink. The productiveness of the works might easily increase so much under a sound profit-sharing system that the earnings of capital and management would rise as well as the earnings of labor. Zeal and good-will on the part of the laborers reduce cost and increase product vastly more effectively than any other influences. The owners would reap other considerable advantages. Their working force would be much more stable; their business would be more regular in normal times, because of the greater stability of the working force; if conditions changed or new demands arose, their business could be modified or transformed rapidly; because all the profit-sharers would be eager to maintain the profits of the business, and therefore to make quickly all needed transformations. But above all the owners would gain a new and great satisfaction, that of cooperating heartily with a contented and happy body of employees.

If the business men of the United States can accomplish in these ways the abolition of the industrial warfare, they will give the world another demonstration—the war has already given a superb one—that democratic government promotes national efficiency better than any other form of government,—a demonstration which would contribute largely to the freedom and happiness of mankind.



# Looking Back at the Liberty Loan

## Some Pointers for the Sale of Our Next War Bonds

### Gleaned from 8,000 Reports by Men Who Helped Place the Two-Billion Dollar Issue

By A. D. WELTON

A BANKER from a small town in Montana writes about the Liberty Loan: "We started out yesterday morning for the purpose of getting a few—Tom Dignan and myself. We got four in the sheriff's office—\$400. The sheriff said his wife wanted to subscribe; we got her for a hundred. Then we got the Greek that runs the hotel by the station for a hundred, then Monomas, the shoe repairer, born in Turkey but a Greek for \$400 and his brother took two hundred. Annie McMillan, who runs the lodging house west of the Savoy Hotel took four hundred. We got this \$1,600 without a refusal. The next man had an invalid wife and an operation pending.

"Speaking locally, people will subscribe but they must be asked. We probably got three out of every five here who were asked to subscribe."

This picturesque recital of the manner in which the pair of Montana bankers got the Greek hotel-keeper, the Turco-Greek cobbler, his brother and the lodging house proprietress to subscribe to the Liberty Loan was an experience multiplied many thousands of times in many thousands of places.

Eight thousand reports of experience sent by bankers to the American Bankers Association are, in this respect, identical: Bonds do not sell themselves. They may be the bonds of the strongest government on earth, they may be issued against the credit of the wealthiest of nations, and make the most stirring appeal to patriotism, but bonds are not peripatetic. They will not go forth among the people, tell their own story and trade themselves for an equivalent of their face value in dollars.

"Life insurance," said a New York financier during the first campaign for the Liberty Loan, "is universally acknowledged as necessary. No one disputes its advantages. Common advice is that every man should have it, but it takes a trained salesman of life insurance to secure the signature of a man to an application for a policy."

That is also true of government bonds when they are to be sold to the people as they must be under present circumstances. When the bond issues were first authorized by law there was a strong disposition to believe that disposing of bonds in this rich country would be very simple. It was the natural thing to believe. Government bonds had been in strong demand for many years. Huge bond issues by railroads and industrial corporations had sold readily. Never before in the nation's history had money been so plentiful. For two years gold had been flowing in a steady stream from across the seas. New fortunes were being made over night. Old ones had been increased mightily. The estimated wealth of the nation ran into fairy figures. The annual income surpassed the dreams of Midas. No nation had such natural resources. No nation had so many acres, such a varying climate, or such ingenious citizens. Did we boast? We did. The chastening had not yet begun. It has not yet gone far but it has begun.

The first discovery was the strange one that two billion dollars is a great deal of money. Bonds to such an amount were not differentiated from an ordinary issue of New York municipals or high class railway securities which may come out in blocks of fifty millions and disappear, under a syndicate's deglutitory operations, over night. Such



disappearance, however, does not mean the passing of the bonds to the private or final holder. It means that the syndicate members have taken them in the confident expectation of selling them to investors. For the Liberty Loan bonds there was no syndicate. There might have been. The government might have said to the banks, "Here's two billions of bonds. Take them at 99½. Sell them at par and keep the change for your trouble." The government did not do that. Congress provided that

the bonds should be sold at par and should bear interest at not more than three and one-half per cent and that they should first be offered to the people. This is the law as to the remainder of the five billions authorized and no serious suggestion has been made to change it.

There were very good reasons why it should be a popular loan. It was not a matter of sentiment. The same law provided for the issuance of short time Treasury Certificates of indebtedness up to two billions of dollars. This was the burden laid out for the banks to carry. It may not mark the limit of their capacity to carry such securities but it is a considerable sum. The fractions of this total of two billions are liquid. The certificates can be re-discounted at a reserve bank or borrowed against and they do not choke the channels of credit and thereby interfere with business. For the same reason the capacity of the banks to buy and hold long time bonds for their own account is and should be limited. Commercial banks exist to accommodate business. They are the agencies in which the credit strength of community, district, section and country is gathered for dispensation in support of commercial progress and for the common welfare. A great many people misunderstand this. Many thought the banks could take the bonds. So they could, and thereby business would have been hampered, credit restricted and depression assured.

The savings banks could not take any undue proportion of them either. In banking parlance savings banks are unliquid institutions. To meet their interest obligations to their depositors, they must have their assets in producing form. So they invest in bonds and real estate mortgages and carry as small an amount of unproductive cash as possible. The announcement of a huge issue of government bonds set the savings bank men to thinking. To encourage their depositors to withdraw their funds for investment in the bonds would have been to invite disaster. Heavy withdrawals would have necessitated the liquidation of their security holdings and have caused the demoralization of an already bad market. Bankers accordingly preached vigorously the necessity of bond payments out of current and future savings.

THE situation was eased for the savings banks by a ruling of the Federal Reserve Board which loosened the legal provision which inhibits a bank which is a member of the reserve system to secure rediscounts from a reserve bank for a bank which is not a member. In New England and the eastern states the savings banks are mutual institutions, managed by trustees and having no capital stock. They are, therefore, ineligible to membership in the Federal reserve system and are denied direct access to the source of supplies of currency. The ruling of the Reserve Board served to release the savings banks from possible embarrassment.



Nevertheless savings were withdrawn for investment in Liberty Bonds. The 8,000 banks—largely country banks—reporting to the American Bankers Association, estimated that \$68,132,860 was so withdrawn. This was well distributed and caused inconvenience in only a few places. But so ill advised were many of those who spoke to the public in behalf of the bonds, that they counselled the withdrawal of savings for such investment. Fortunately such advice went unheeded and the savings banks stood the shock. An increase in the interest rate to four per cent or higher might have serious consequences if shock absorbers in the form of increased savings should not be provided. Just now this outcome is not feared. The people's earnings are large and the disposition to thrift and economy is growing. Thrift and economy are the remedies and success in financing the war—economic success—depends upon the willingness of the people to practice thrift and prevent waste.

The sale of Liberty Bonds brought to light some hidden money. The banks reporting estimate the amount that was dug out of hiding places for the purchase of bonds at \$3,298,884. The people of this country are without miserly traits, comparatively speaking. The sums of money buried behind

the wood shed, concealed in the rafters or stowed away beneath a loose stone of the hearth are not great. Foreigners newly come are the greatest offenders and the Postal Savings banks are divorcing them from this lack of confidence in banks. It is, however, not improbable that the loan caused ten millions to be poured from the proverbial stocking of the unbelieving hoarders.

The situation in France in this respect is quite different. The French peasants have been burying coin for centuries. They dug it up to pay the great indemnity after the Franco-Prussian war and they have been digging it up for the last three years. Governor Strong, of the Federal Reserve Bank of New York, recently told of the experience of a French official who was connected with the Bank of

France and also happened to be mayor of the small town adjoining his country home.

France, knowing the habits of the peasants, made an early effort to get money from their buried hoards. The process was simple and direct. The official referred to by Governor Strong had the town crier call the peasants to a meeting at which the mayor made the disclosure of the country's need and an appeal for funds. The immediate

result was an embarrassing silence on the part of the assembled peasantry. Urged to an explanation of this unpatriotic deportment an aged man finally ventured that the relation of their ability to supply funds would be disastrous if made in public. He then explained that the French wife is the custodian of the savings and she is not accustomed to confiding the amount of her hoard to her husband. On the other hand the husband is naturally averse to disclosing what he has held back from his wife. So it was arranged that the peasants, one at a time, should bring their treasure and turn it over in private to the government's representative. This was done.

One old peasant brought to the officer a leather bag out of which he poured nearly 3,000 francs in gold. Several of the coins dated back to Napoleon I. He was

given a receipt and as he was about to leave he asked:

"How much money is the government going to want?"

"A great deal," replied the officer.

"Will they ask once more?"

"Oh, yes."

"Will they ask twice more?"

"Undoubtedly," said the officer.

"Well, I can do it twice more," replied the peasant as he went away.

The bonds brought some millions from hiding. The war has sent other millions into hiding. It is not easy to trace the latter, but a hundred bankers reported their moral certainty that withdrawals of savings were made in many cases for this purpose. (Continued on page 49)



Farmers did not subscribe heavily to the Liberty Loan. One explanation of this was that many canvassers—like the one in the picture—did not know how to overcome such objections as "Where'm I goin' to keep the bond if I get it? Might as well have money throwin' 'round the house." Therefore all the canvasser got was the skeptical look.

# BEANS

## Builders of Brain and Muscle, They Uphold Their Ancient Traditions, by Assuming an Important Role in the Present Struggle

By JAMES M. BINKLEY

WERE such a performance possible, the autobiography of a bean probably would start with the vegetation that began to sprout from sleeping seed in the earth immediately after Noah disembarked on the sterile crown of Mount Ararat.

Humble, then, the bean is not. And the cheapness has ceased for the present. Beans for planting cost farmers this season from \$10 to \$12 a bushel. The food price at retail was considerably higher.

It lies in no man's mouth, therefore, although it may be filled with porterhouse steak, irreverently to refer to the bean, red, white, mottled or black, or whether it be baked, boiled or made into soup.

On the unread surface of the bean are the records of mighty events that occurred before man learned to write on barks, skins and obelisks. Moses ate beans; as did Abraham, and, doubtless, Cleopatra.

Races have come, ruled and vanished, but the bean, always here, is here yet. Napoleon fought and Shakespeare dramatized and Hannibal marched over the Alps, but they perished from the face of the earth; yet the bean is nourishing millions of soldiers along the edges of Belgium and France. Writers, poets among the rest, notably in the neighborhood of Boston, are sustained and inspired by the protein stored within its depths.

The carob beans, Wilson, the British writer on agriculture, has said, were once supposed to be the locusts eaten by John the Baptist and, consequently, have been called "St. John's bread." But John was a modern character when compared with Pythagoras, who lived about six centuries earlier.

"Shun the bean," exhorted that ancient philosopher, addressing his Grecian followers. Interpreted into modern terms, "Shun the bean" meant "Leave politics alone." In those days, both among the Romans and the Greeks, ballots were beans and were cast into helmets at the election of magistrates.

A white bean was the symbol of one candidate, a black bean the symbol of another candidate and so on. There must have been scandals, the stuffing of helmets with more beans of one color or all colors than there were citizens in the precinct and, possibly, the open purchase of a virtuous and enlightened electorate to the shame and anger of high-minded reformers like Pythagoras.

Anyway, his "shun the

bean," or his robust words to that effect, seem to imply that the politicians of 550 B. C. were no better or smarter than were the politicians of a much later period.

"I redeem myself and my family by these beans," solemnly and hopefully chanted the ancient Roman, while, as he stood at the tombs of his fathers, he threw black beans over his head nine times. He had washed his hands three times, and had placed flowers, food and gifts upon the graves. If it were night, he had a lighted torch or lamp,

that his ancestors might fall into no error as to his identity and redeem the wrong persons.

Yet among the early races of men a white bean stood for absolution and a black one for condemnation. This evidently is the origin of the practice in clubs and

secret societies of voting out objectionable applicants for membership by the process known as blackballing.

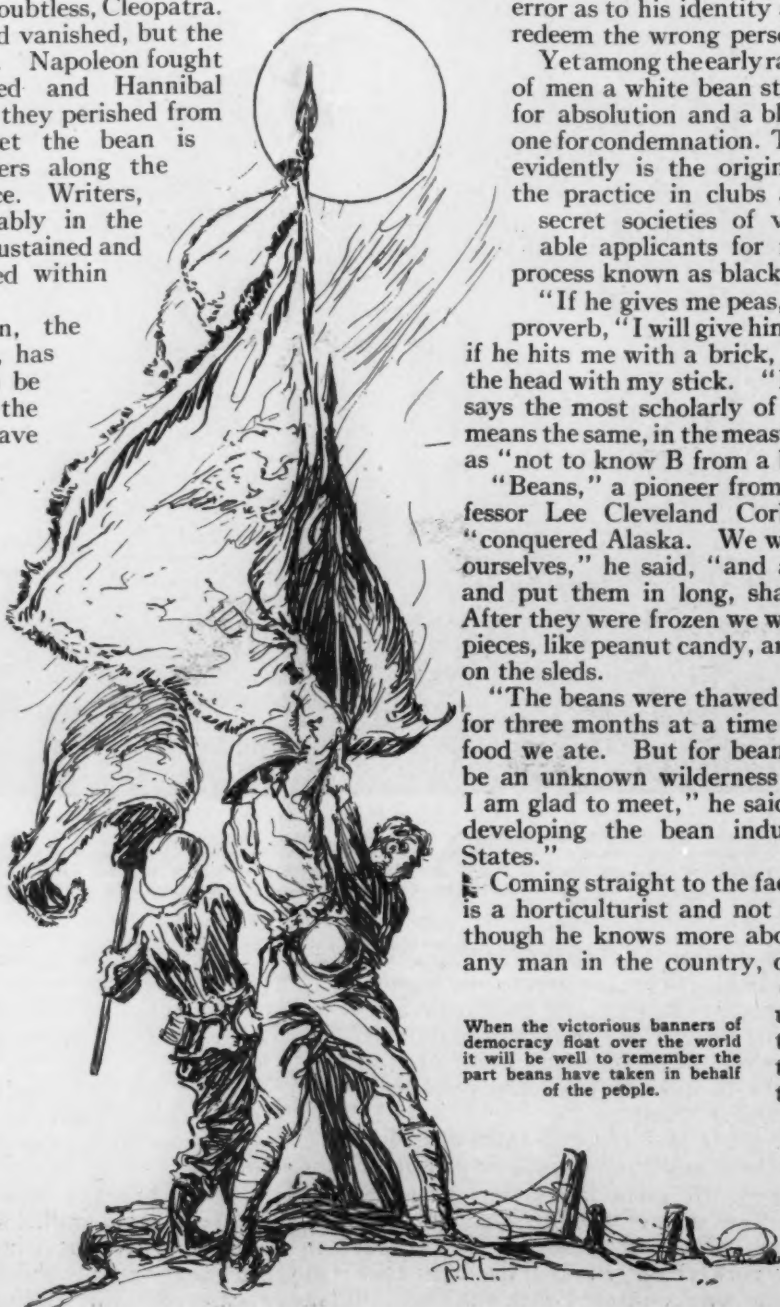
"If he gives me peas," runs an old French proverb, "I will give him beans." Otherwise, if he hits me with a brick, I will cudgel him on the head with my stick. "Not to know beans," says the most scholarly of modern dictionaries, means the same, in the measurement of ignorance, as "not to know B from a bull's foot."

"Beans," a pioneer from the North told Professor Lee Cleveland Corbett the other day, "conquered Alaska. We would cook a batch for ourselves," he said, "and a batch for the dogs and put them in long, shallow pans to freeze. After they were frozen we would break them into pieces, like peanut candy, and carry them in bags on the sleds."

"The beans were thawed by a spirit lamp and for three months at a time were about the only food we ate. But for beans, Alaska would still be an unknown wilderness in the snow and ice. I am glad to meet," he said, "the expert who is developing the bean industry of the United States."

Coming straight to the facts, Professor Corbett is a horticulturist and not a bean specialist, although he knows more about beans than does any man in the country, or possibly anywhere else.

A Cornell graduate of 1890, and a teacher of horticulture and forestry at that and other universities, he became an official of the Department of Agriculture, in Washington, sixteen years ago. He was, besides, the horticulture editor of



When the victorious banners of democracy float over the world it will be well to remember the part beans have taken in behalf of the people.



Century Dictionary and of the International Cyclo-pedia.

Beans are now a large item in the long calendar of his work. He knows them by colors and countries, by shapes and sizes, and understands them, whether they be green or dried. An imaginative man, as well as a scientist, he sees in the bean the wars of the past and the philosophy of the centuries.

The human race, it is said, originated at a certain place. Thence it spread until it covered the earth. White men and red, black men and yellow, traced backward far enough, center in one spot and belong to the same family. Man, after all, is local. The bean, however, is universal. Its home is where it grows and it grows almost everywhere, except in the precincts of the North Pole. It is a native of India and Japan, and also of the United States and Europe.

The bean, therefore, is worthy of the study and sentiment of Professor Corbett's best moods. He does not idealize or personalize it, imitating other men who over-endow their favorite animals or vegetables, but he believes that the invincible bean put down the Civil War, whipped Spain in 1898 and is now beating the Huns to their knees in the dust.

"Up to 1861," he said to the writer, "beans were not used much in this country. Railroads fifty-seven years ago were crude and found it difficult to supply the Federal armies with guns, ammunition and clothing and bulk was eliminated so far as possible in the matter of food.

**B**EANS, with pork, are very nourishing, and northern quartermasters began buying them and shipping them to the soldiers. When, at the close of the war, the soldiers returned to their homes, their appetite for beans, created in camp and on the march, soon made itself felt in the market. There was a demand for beans and farmers began growing them.

"The bean industry was established by the Civil War, as was the industry in light-colored smoking tobacco. Union soldiers found a new tobacco in North Carolina which they liked and which they tried to buy after the war closed.

"A Confederate soldier, riding a blind mule and having fifty cents in his pocket, traveled back to North Carolina, when Lee surrendered at Appomattox, and began cultivating and curing the particular kind of tobacco that the Federal soldiers had found so satisfactory. His business grew and he became a millionaire. The son of this man organized the largest tobacco company in

existence, with branches in Great Britain and in other parts of the world.

"Beans made no millionaires but they increased the prosperity of farmers in the North and in time became a valuable crop throughout the South. The men in blue and the men in gray, while fighting one another, joked about beans and sang humorous songs about them, and also about fat pork, but they knew the food value of both and the dietary habits they acquired as soldiers were not given up when peace was restored.

"The soldiers of the regular army have eaten beans for years. They ate

great quantities of them during the Spanish war and on the Mexican border and are eating them now in France. British and French soldiers are living on them, and the American product, at that. When the banners of democracy are seen floating all over the world it will be well to remember the part that the bean has taken in behalf of the people in their battle with kings and emperors and their divine rights.

"The acreage in beans a half century ago was small," Professor Corbett went on. "It has been growing, however, from de-

cade to decade. The yield last year on 945,000 acres was 8,846,000 bushels, as against 928,000 acres in 1915 and a crop that totaled 10,321,000 bushels.

"Many foreign buyers were in the market last season bidding for a crop that was 1,855,000 bushels less than the crop of the previous year. The farm value of beans, therefore, increased from \$2.59 a bushel in 1915 to \$5.06 a bushel in 1916.

"Farm value means the price that the grower receives. Very few, if any, consumers bought beans even for \$6 a bushel. The price mounted higher and higher as the stock disappeared from the market. It would be supposed, naturally, that the acreage this year would break all previous records. The dearth of seed, however, has worked, in my opinion, against such a theory. Seed sold as high as \$12 a bushel, or twenty cents a pound.

"Then in several states the weather for beans has not been favorable. My old home is in western New York, where the farmers who once grew wheat have become successful producers of beans. One man whom I know was driven off his bean land seven times early this spring by rain."

"Why didn't he stay off after, say, the fifth time?" the interviewer asked.

"Now," Professor Corbett answered, "you are trying to lure me into the bogs of psychology. Why doesn't a merchant shut up shop after a great disaster? Why do Wall Street men speculate in spite of a long succession of



Magistrates were elected in Greece and Rome by the casting of beans into helmets.

wrong guesses Your question is no easier to answer than either of mine.

"A wheat man sticks to wheat, a corn man to corn and a bean man to beans. The buyer of railroad or industrial shares never knows what is going to happen. All that he can do is to think and hope.

**I**T IS the same, practically, with all sorts of business men. But the farmer faces more uncertainties than does any one else. The cost of making a ton of pig-iron, in normal times, can be ascertained in advance. So much is figured for coke, ore, labor, overhead and so on.

"The ablest farmer in the world, however, cannot estimate beforehand what it will cost him to produce a bushel of beans or a ton of hay. Floods, dry weather, wind storms, frosts and insects are beyond human computation. The labor of a whole season can be lost in an hour or over night. Farming, in short, is the most exciting business known to civilization."

"But the farmer looks calm and his physical motions would indicate that his mind is at peace with the world," the interviewer observed.

"The result of reaction," Professor Corbett answered, "after years of ups and downs. If the farmer surrendered to defeat or permitted his nerves to master his determination the country would perish from hunger. The bean grower in New York who was chased off his field seven times illustrates his class. Courageously he returned to his plow and in the end planted his crop.

"It is said that Wall Street operators like excitement. If such actually is the case they can get more real action of that nature on farms than they can in brokers' offices. Studying the sky is just as uncertain as studying a black-board filled with quotations. And more healthful to those so engaged and more useful on the whole. If speculators would turn to agriculture, beans, especially, they could obtain all the pleasures of the chase and at the same time help to bring down the cost of living.

"But our dialogue," Professor Corbett remarked, "pertains to beans. The bean states of this nation, with their rank, are as follows: Michigan, New York and California, which are the big three of the group; and Wisconsin, Maine, Virginia, North Carolina, Tennessee, Missouri, Minnesota, Illinois, New Mexico and West Virginia.

"In Michigan and New York beans are as staple a crop as was wheat a quarter of a century ago. They pay better than wheat and, drawing nitrogen from the air, keep the soil in good condition. New Mexico and Colorado are rapidly becoming two of the best bean-growing regions in the country. Other states, perhaps, will increase their crops. There is room for expansion.

"The year before the war, that is in 1913, this country produced eleven million bushels of beans. The Russian crop was twelve million bushels, the Japanese crop twenty million bushels and the Italian crop twenty-three million bushels, which was more than twice the size of the crop in the United States. British India grew one hundred and twenty-four million bushels and Great Britain itself nine million bushels.

"Americans should add more beans to their diet. Beans are rich in protein but lean in fat and, therefore, they are usually cooked with pork. They are nourishing and beans and bread take the place of bread and meat. They are natives of this country. The Indians ate them along with corn, also a native product, after which, presumably, they filled their pipes with tobacco, another strictly American plant.

"The mound builders of Ohio had holes for their waste and rubbish. Antiquarians, exploring the holes, have found quantities of beans burned in cooking. The squaws were gossiping, perhaps, and let their earthen pots boil dry. Burned over, and thus sealed up, the beans were preserved for ages and are now in a museum.

"No man, so far as I know, ever saw a wild bean, nor a wild corn stalk. All beans, however, once grew naturally in this country and in Mexico and South America. There are white, red, gray and mottled beans and black-eyed ones. Those that are baked, boiled or made into soup are called field or dried beans. Then there are lima beans and garden, or string-beans, which are eaten, pods and all.

"One of our men sent us a hundred varieties of field beans from South America. New varieties are created by

planting different kinds of seed in the same field or garden.

"Farms of a thousand acres and several of fifteen hundred acres are producing beans in California. The average yield for the country last year was about nine and a half bushels, as compared with eleven bushels in 1915. A good crop is sixteen bushels, although the yield occasionally goes as high as twenty-five bushels and even forty.

"Usually a grower is through with his beans after they have been threshed and sacked. Much remains to be done, however, before they are ready for the consumer. They must be cleaned and graded. A fan blows

out the sticks and straws and another machine removes the split seeds and stones. Discolored beans are picked out by hand. Women generally do this work. Each bag is graded into three sizes—large, small and medium. Small beans bring the highest prices.

"When discouraged, plant beans. There is no widely adapted garden crop that will do so well on poor soil and nothing that is nearly foolproof as beans. The limits of the planting season also are elastic. The gardener may give his backward onions or beets another chance to make good and still have time to fill in their places with beans if they fail. Beans of the garden and field sorts may be planted in the latitude of Washington for a mature crop until the middle of July. In the latitude of New York throughout June.

"The farm value of beans in 1900 was \$1.51 a bushel. Before the war of 1914, the value to the grower had more than doubled. Considered in terms of money, the bean is no longer a plebeian but a plutocrat."

Civil war troopers who had been fed on "pork and" carried home their appetite for beans.





# MARS ON THE LINE

How Wire and Wireless Companies Have Met the Task of Fitting the Country To Handle All Internal War Messages as Well as the World's Cables

By H. M. BAILY

THE singing wires that carried to the American people the news that they were officially at war with Prussianism, were ready at that moment to step forward and accept the full consequences of their message.

Last February the gangs worked twenty-three out of twenty-four hours in order to put Washington on enough wires to keep the world from getting the busy signal when it called. They did not get it all done then but it helped the March gangs who slowed down to twenty hours. Long line wires out of Washington increased from 149 to 300, two hundred more are now being installed. Long distance operators were increased over the country to the number of 12,000 and more are in training. Whereas one circuit on the Transcontinental line between Chicago and San Francisco has heretofore handled all existing commercial business, two additional circuits for the complete distance are being constructed.

A comprehensive system of exclusive telephone and telegraph service is being installed for the use of the Army, Navy and other departments. This will release for commercial uses some of the 10,000 miles of equipment which have had to be taken for the government use. The headquarters of all the naval districts, and the army camps and headquarters and all other necessary points are in touch with Washington by almost perfect wire connections.

But the greatest task is just beginning. The mobilization camps to be established immediately must be thoroughly equipped with every wire facility. Sixteen cantonments each containing 40,000 men will spring into existence within a few weeks. Six hundred and fifty thousand men will require telephone and telegraph service both for official and personal purposes. In an average city of 40,000 souls, not every citizen expects everyday messages of an emergency character but these are to be cities of our men who are going to war. There must be no mistakes, no delays, no difficulties for them. Washington must be on all of the sixteen wires all of the time.

In this instance, as in every other enterprise to-day, it's the men we are going to lose that make the thing loom big. We have been so used to putting large forces to work on colossal jobs and hurrying them to completion. Money did not count. It was the men. But now the large forces are not going to be available. The problem is to get greater projects through in less time with fewer men.

Ten per cent of the wire companies' employees between the ages of 20 and 31 are already in the service of their country. Three thousand Morse operators are ready for the Signal Division. Four battalions of officers and men, trained under Brigadier General Squiers, are members of the Signal Corps. Not only the trained experts but the construction and wire gangs are depleted.

Regiments of girls are in training to take the places of those who are to go in the offices but they have not yet taken to training for stringing wires. Telephone and telegraph schools are in session all of the time excepting Sundays. The girls undergo a physical and mental test. Most of them seem to feel the seriousness of the situation rather more than the average busy citizen. It brings it home to you to have to fill the empty chairs.

Most of the girls in the telegraph schools are learning to manipulate the wonderful new automatic telegraph device which has been installed in stations all over the

country. It has greatly facilitated the training of new operatives. It is not necessary to know the Morse code. A good typist can run the machine providing her nerves are strong and her powers of endurance sufficient.

ALL wires of communication—like their political namesakes—lead to Washington. From every corner of the civilized world, calls are coming in continuously.

It is a dramatic feature. Requests of harassed governments, desires of dying dynasties, the urge of defenseless people, tales of victory and defeat, the plight of the wounded and the plaint of the hungry all hammering at the heart of the nation over multitudinous, tiny copper wires.

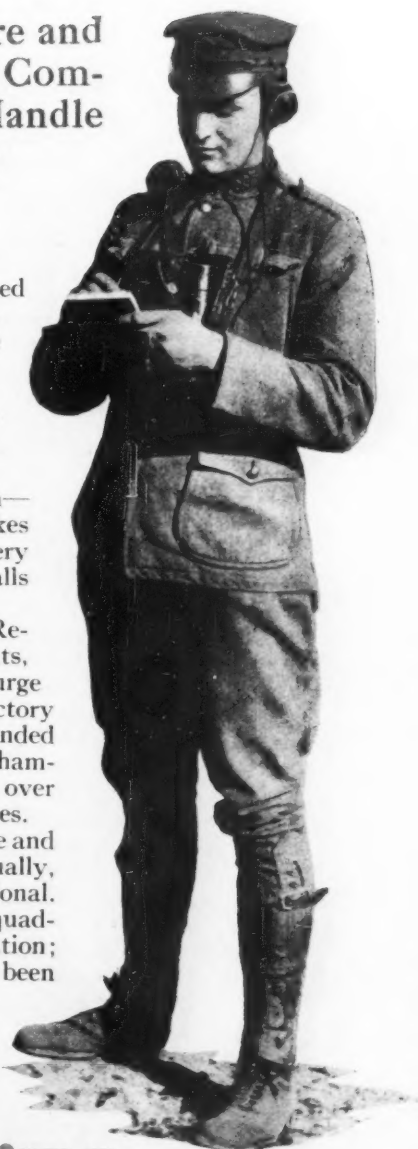
The telegraph, telephone, cable and wireless creeping upon us gradually, have suddenly made us international. Commercial cooperation has quadrupled through prompt information; vast investment increases have been assured by hour-to-hour intelligence; a world has become joined to us by the bond of common knowledge. We did not appreciate the hold upon us until we found it no longer possible to shut from our ears the cries of the nation's friends and live unto ourselves. The world's business had become our own.

We could not talk to it of its troubles and take no part in them. Our boundaries and responsibilities have come to be limited only by the reach of our messages.

When the severing of diplomatic relations with Germany became a fact, the Council of National Defense said:

"With regard to the utilization of the telephone and telegraph systems of the country for the government's needs, the vital thing fully realized by both the Federal Officers and the wire companies has been to perfect a coordination to secure complete cooperation not only between the government and the companies but between the companies themselves with regard to communications and censorship of communications."

This is the first time in the history of warfare that methods of immediate intelligence have played so vital a part. It is the first time a nation has been able to bring to its aid so vast a perfected system of intelligence transmission as is to-day under the control of American capital. Following the statement from the Council of National Defense, officials from the wire companies and the government went into conference. The result was inevitable. The nerves of the nation joined up to the one spinal column and prepared to perfect itself to furnish to the government head and heart the nervous force for the waging of the gigantic struggle before it. The telegraph-



© CENTRAL NEWS

A Signal Corps private of the American forces. His 'phone is as much a part of his equipment as his shirt. It can be hooked onto a wire anywhere and is ready for instant use.

telephone-cable wireless is now an integral part of our fighting strength.

Scarcely one hundred years ago it took fifty-two days for news of the Treaty of Ghent to reach the men behind the guns. During those seven weeks there was continuous fighting about Mobile and the Battle of New Orleans with its needless loss of life had been decided before the news arrived that peace existed. To-day it takes less than five minutes to send a message from the War Room at the White House to London.

The world was a long time awakening to the fact that Morse had something to offer that was vital and revolutionary. He was a dreamer and his art appealed to the public far more than his alphabet. Not until 1842 could he secure sufficient funds to enable him to test out his telegraph. Then Congress let him have \$30,000 for a line from Baltimore to Washington. Twenty years later there were 150,000 miles of wire over which the Morse code was singing.

Deep interest in the transmission of immediate intelligence had not, however, even at the time of the Civil War, taken a great hold upon the world's imagination. It was looked upon as a business luxury or as an emergency necessity. Not all of us have yet forgotten the early terror at the sight of the yellow envelope. The grizzled veterans of the Indian warfare found the telegraph their chiefest friend but during the Civil War, Congress was patently inimical to the Signal Corps. Nevertheless the idea had gained ground. If it were possible to send electrified messages across the earth, there must be some way of getting them over the seas.

The first congratulatory message sent across Cyrus Field's submarine cable in 1868 was from the President of the United States to the Queen of England. It said in part:

"All civilized nations should declare spontaneously that the electric telegraph shall be forever neutral; that the messages entrusted to it shall be regarded as secret even in the midst of hostilities." How little did they foresee the vital grip upon the pursuits and passions of mankind this world wonder was to gain.

About 45 years ago Alexander Graham Bell, teaching deaf mutes to talk, wanted to make a phonograph. He got a dead man's ear. From experiments with that and a portion of gold-beater's skin stretched over a drum-head with a small piece of metal glued in the center, we got our telephone. Three years later he was greatly cast down because the Western Union Telegraph Company declined to pay him \$100,000 for all his rights in what is the greatest single patent ever issued. The first commercial telephone company was established that same year.

PUPIN'S induction coil, but little later, carried the telephone to its long distance possibilities. On its fortieth birthday, men at Washington held receivers to their ears and listened to conversations in cities from the Atlantic to the Pacific, and from General Pershing on the Mexican border to the Governor of Ottawa, Canada.

Wireless is the lusty youngster in this important family. It is only 16 years since Guglielmo Marconi demonstrated the success of his invention. At St. John's he received a message through 2,000 miles of ether from his station at Poldhu, England. Dr. Guiseppe Musso came to this country about ten years ago to perfect his wireless telephone. He has, instead, shown that he can talk over 5,000 miles of submarine cable which will make it possible to utilize the present submerged lines. Wireless communication from Arlington to San Francisco and Hawaii has been accepted by the general public as a commonplace. Yet during the Spanish-American War, ships that left San Francisco and landed at Honolulu might have been out of the world as far as news was concerned.

Following Field's success about 1,800 corporation and government cable companies were established with something like 205,000 nautical miles of submarine lines and something over 6,000,000 miles of telegraph wires under

their control. Of these the United States owns about two-thirds. Over them, in the ordinary routine of business, 15,000,000 cablograms and 500,000,000 telegrams passed annually. With our entrance into the war the cable business increased 100 per cent.

We prove ourselves an amazingly talkative nation when it comes to the development of the telephone. The advance in the use of Bell's invention has been limited only by population,—the extent of its influence only modified by human endeavor. Death, distance, time, the dangerous desert and the formidable mountains have all failed to stay our insatiable desire for individual exchange of thought. It is as though the electrical force which can carry the voice 56,000 feet a second over the wire as against only 1,160 feet unaided, had revitalized us in that same ratio.

SINCE 1902, the telephone has increased in this country over 100 per cent. In one rural section alone, within a thirty mile radius of Chicago, 18,000 farmers now have wire service. In a medical report from the Middle West it has been estimated that insanity among women in formerly isolated districts on the great prairies had decreased 25 per cent since the universal advent of the telephone. If the cable made "the hands across the sea" an actuality, and the telegraph eliminated time and terminated suspense, the telephone has brought to us the electrifying, courage-producing human contact which those appreciate who have heard the "Touch shoulder, Men" under fire.

What the telephone has done for the social and the business world it is now doing for the war world. It has been contended that victory is to the bank account. A mere "measure of value" never yet won a great moral conflict. The force of honorable purpose, the massed strength of human intelligence backed by the perfection of electrical thought transmission is a power that is not computable in dollars and cents.

Europe has laid aside its peace wire service almost entirely. Its telephone, telegraph and cable service is confined almost entirely to government matters and field service. Censorship is so strict in England and France that no telephonic communication is permitted saving in English in the former country and in French in the latter and even then someone "listens in."

Fortunately our going to war set the wires tingling. Wire business went to the nth power and planned to go beyond. And it's a pace that we've got to keep up. There can be no resting on the job until the war is over. Government messages have of course been given precedence over all others, but commerce and industry have had no discouragements. The Navy took over the strict censorship of the cable and the army that of the telegraph, but so far only messages to Mexico have been subjected to supervision and one can talk over the telephone in any language that will be understood at the other end.

It is taking some wire and more construction and an immense amount of inventive ability to overcome all of the difficulties in the way of furnishing all the communicative powers required by the country in a few months.

ON the great battlefields of Europe methods of immediate communication have been "doing their bit." Modern warfare has become so much a matter of machine guns, deadly gases and scientific means of wholesale slaughter, that it has developed a necessity in the fighting man for cunning as well as courage. Heroism there is in great quantities, but it is attuned to present day exigencies.

In the old days the stories of the safely carried despatch thrilled us all. The mantle of the courier has fallen on the cable detachment. There is something thrilling and uplifting about pursuit or flight or fighting or death in action. The excitement furnished a measure (Concluded on page 48)





An advanced artillery post on the British line in Belgium. If the aeroplane is the eyes of the army, the telephone is the ears, and as such is of almost equal importance. Stationed far to the front in shell-swept positions the observers direct the fire of the big guns by telephoning the hits or misses seen through their binoculars. During important engagements these men spend days in the trees and shell pits that hide them. "Line trouble" with an observer may mean the slaughter of a regiment.

# Ranks of Growing Grain in the Greatest

**I**T IS all over and after the right fashion. For there is no longer any question as to an abundant and overflowing harvest, especially of food products.

And it is all due to an interesting and rather unusual meteorological phenomenon, such as does not often cause and accompany such crop yields. Early in July when the southwestern "lows" became fewer and fewer, the moisture bearing "lows" from the northwest came much further south than is usual at this season, so that the otherwise thirsty Great Plains States were not entirely without precipitation.

Also there were many thunderstorms. Now thunderstorms are local affairs and are provincial and partial in their methods, unlike the all embracing "lows" which are nationwide in their scope, and cause the rain to fall alike on the just and the unjust. Because of these thunderstorms, there were many dry spots in close juxtaposition to torrential downpours. So the crops were likewise, as the spotted condition in many states clearly indicates. From Northeast Washington across Northern Idaho, Northern Montana, Northern North Dakota into Northern Minnesota there is a long, narrow strip where fierce hot winds and long continued drought burnt up vegetation and marred the early promise of great spring wheat yields. While immediately South in Minnesota, and across in Northern Wisconsin the rains, as in Longfellow's poem, seemed never ceasing. These same spotted conditions prevailed in Southern Nebraska, in most of Kansas and Oklahoma, in West and South Texas, in most of Louisiana, in Southeastern Arkansas, in Southern Mississippi and in Southern Alabama.

This is why the good and the poor spots in these states are associated as in Joseph's coat, cheek by jowl.

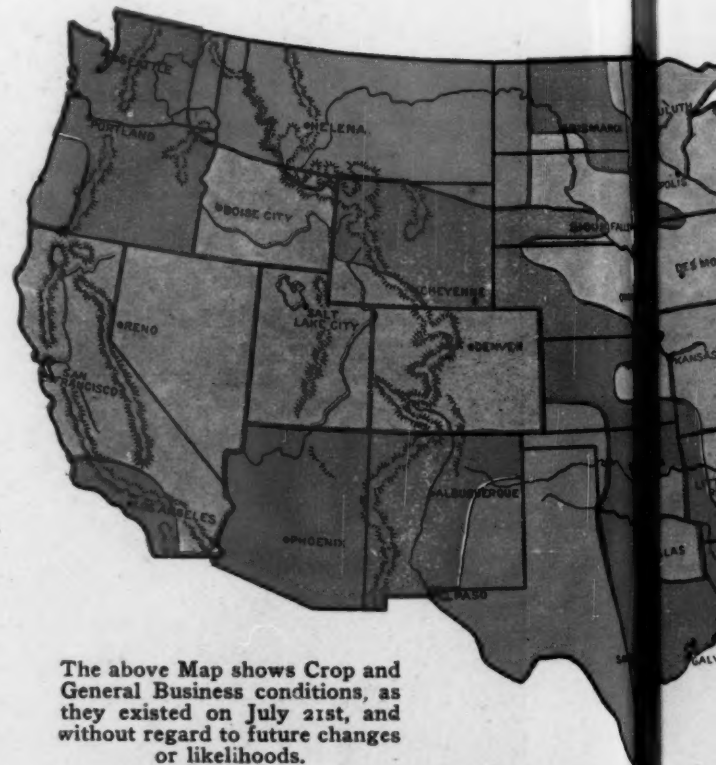
Fortunately in nearly all of these drought stricken sections there have been of late continued, abundant rains, reviving vegetation and the crops that were not too far gone, and making possible planting of emergency "catch crops" as food for man and beast.

**A**S serious as are these calamities locally, they are swallowed up in the immensity of a generally unprecedented harvest. The corn crop may run to 3,200,000,000 bushels and even over, despite the damage done in the South and Southwest by heat and drought, and in the extreme North by too much rain. Oats follow with a possible yield of 1,500,000,000 bushels. Combined spring and winter wheat may exceed last year's output by nearly 100,000,000 bushels, provided black rust be absent in the Northwest from the spring wheat fields. There will be more sweet potatoes than last year; probably 150 million bushels more Irish potatoes; more rye; more barley; more beans and peas; nearly the same amount of hay and rice; more sugar beets and sugar cane, more sorghum grains, more peanuts, much more fruit of all kinds save the citrus varieties, and a very great many more vegetables. There will probably be more cotton, but it is too early to estimate that, even though cotton made great strides in July, for it is very backward, not very far advanced in growth, and recent wet weather in the cotton belt has caused boll weevils to increase and multiply after their fashion and in pursuance of the primal command.

Those unknowing and hysterical Cassandras of woe, who prophesied a possible food famine in this country, and the likelihood of our being unable to furnish needed supplies to the Allies, may now cease from troubling. Such is the story of a wonderful and unprecedented harvest, which furnishes the most substantial basis for future business.

Equally is the story of every great industry that of unchecked

By ARCHER WALL



The above Map shows Crop and General Business conditions, as they existed on July 21st, and without regard to future changes or likelihoods.

**L**AST spring the dismal voice of the pessimist was raised in the land. Submarines were sinking fleets of ships, Russia was lost, food supplies were dwindling, famine for all of us was imminent. And crops—!

The pessimist grew hysterical when he spoke of crops. Our outlook was as dark as a stack of black cats. Official reports further elongated the faces of the people.

One of the few cheering rays that pierced this unhappy horizon was the crop forecast by Archer Wall Douglas in *The Nation's Business*. He refused to adopt the robe of Isaiah.

Our readers recall that Mr. Douglas, flying in the face of the official reports, correctly forecast spring wheat, winter wheat, and then corn. So at variance was he with the current estimates that he and the National Chamber were belabored soundly by the Hearst papers on speckled charges of manipulation.

But a month or six weeks after, *The*

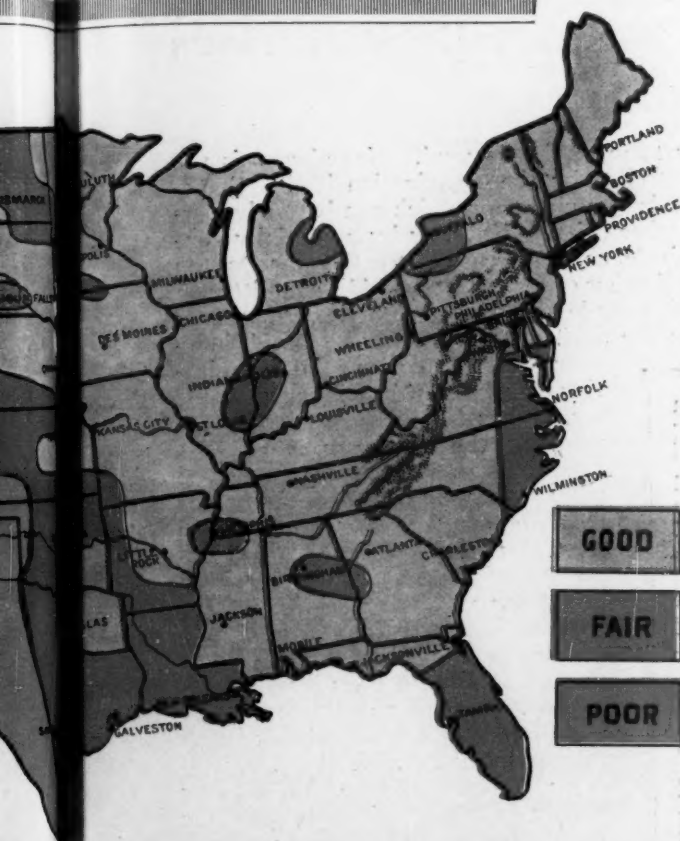
volume running at flood tide. The principal difficulty is in getting efficient labor. Because of conservatism in labor is very low, and a bar to better and more economic from the South to the industrial already serious results. It left introduced in Northern altitudes a

The prices at which the government's needs has already caused a



# Greatest of All Crops Answer the Kaiser

R WALL DOUGLAS



iron and steel until the effect upon the general market can be seen. The effect of high prices is increasingly apparent in the falling off in demand for many things of luxury and for those odds and ends, often unnecessary, which help to make up the volume of business. It appears, however, so far to be largely a shifting to cheaper articles and more staple ones. In the oil business the high cost of sinking a well is restricting development, as is also the difficulty in procuring the necessary casings.

The mining industry is unusually good, and is afflicted to a far less degree than usual, save in copper mining, with those strikes and that industrial strife, which seem inseparable from it. There are two interesting side lights on mining which show the general trend. One is the discovery and development in Northeastern Oklahoma of great zinc and lead deposits, which are easily and economically worked. The other, the profitable working of iron ore mines in Southwest Virginia, away from the railroads, this being now made possible only by the enormous demand and high prices of all iron and steel commodities.

THERE is much activity in ship building along both Atlantic and Pacific coasts. It awaits, however, with much eagerness and anxiety, especially on the Pacific coast, a clear and definite policy on the part of the Government as to what proportion of materials, steel and wood, will be used. Of late on the Northwest Pacific Coast it is hampered by serious labor troubles in the lumber industry. When these obstacles are cleared away much activity may be expected. Being a comparatively new industry in many sections, especially as to the extent to which it is now prosecuted, it encountered

many handicaps in the way of procuring necessary tools, material and labor. It is consequently remarkable for the progress it has made under many unfavorable conditions. Contrariwise, building in the interior is halted by the high prices and the absorption of capital for government purposes. Co-incident with all this business at high tension there goes on, unnoticed, changes of great moment, which make for progress and permanent wealth.

The Dairy industry, dependent upon uninteresting and unromantic "Sis Cow" is fast becoming a matter of much moment, and of great revenue producing possibilities in every state in the Union. Its output in the State of Wisconsin alone is \$110,000,000 annually. The same general story is true, likewise, of poultry, the great show-me state, Missouri, leading with annual surplus products of \$50,000,000.

In Alabama, King Cotton, like many another king, has lost his job, and Velvet Beans, Soy Beans, Peas, Alfalfa, Corn, Peanuts and Truck Gardens reign in his stead. For Alabama is permanently given over to diversification as is true of every other Southern state.

In the Great Plains States, Kansas, Oklahoma, Texas, New Mexico, and Colorado, the sorghum grains, kafir, milo, and feterita, will yield 100,000,000 bushels this year against 50,000,000 a year ago.

Among the rank and file of business men throughout the country, the certainty of a great harvest has given a sustained confidence which nothing else can match. There is no desire anywhere to minimize the seriousness of the situation which confronts us. But in all the welter of war, of coming heavy burdens of added expenses, of the uncertainty as to when peace, and consequent readjustment, will come, there are two factors upon which the average man leans in confidence. A currency system, which he believes will be equal to any occasion, and an abundant harvest, ever the sustaining force of prosperity.

of the nation's Business, with a bit of questionable strutting, saw the same official and other reports come into the Douglas camp. Naturally, Mr. Douglas' remarkable map with its no less remarkable interpretation has brought scores of inquiries as to how it is done, and he has promised to tell our readers all about it in an early number. "Crop forecasting," he says, "is what Koko remarked on an histrionic occasion, 'a delicate, difficult and, not to say, dangerous operation.'"

For the present, let us repeat that the material from which Mr. Douglas draws his map—and his deductions, is gathered under his direction by 800 trained observers who have no personal interests whatever in the districts that might make them see through colored glasses.

We congratulate ourselves again and again that after many months of cajolery, intimidation, and exhortation we were able to obtain this service from Mr. Douglas for our readers.—Editor.

de. In so in manufacturing where the shifting material and sufficient and shifting, the percentage of efficiency, and serious handicap is a constant methods. The exodus of negroes of the West and the East has had untilled fields in the South and in a social and economic racial problem. The government will buy commodities for the purchases of many lines of

# Leading the Way In War's Confusion

## Local Business Organizations, Which Trained and Inspired Men Now Rendering Incalculable Public Service, Shape Community Activities So That We May Be Victorious

By HOWARD STRONG

**F**OR the first time in fifty years every citizen of the United States is engaged in the same business. The steel worker is boring cannon; the farmer is planting and harvesting food for the armies in France; the tailor is making khaki uniforms, and the military man is drilling, not for dress parade or theoretical engagements, but for service in the field. The nation's business is war.

Upon April 6, when war with Germany was declared, the supreme requisite for good citizenship became national service. As with the individual citizen, so with the citizens' organization. It is not that the ordinary occupations of the civic body have become less important, but the new business of the nation is of so much greater significance, that the pursuits of peace must, for the time, take second place.

The first requirement of the community organization is adaptability. It must recognize the need of the hour and must lead the community in meeting that need. The organization which can now forget the problems of its own community, which can subordinate the welfare of its members and of itself in the great business of the nation, is the one which will win for itself the leadership of the future. The organization which fears resignations and loss of financial support, or which is unable to find a program that will compel the interest of its members, is failing in appreciation of its part in meeting the nation's need. The great opportunity of the commercial organization is at hand, and all over the country the organized business men are rising to this opportunity and are helping to meet the responsibility which has been placed upon every community and every citizen.

That their organizations may be equipped to meet the new demands, many communities have, during the past few months, willingly contributed new members and additional funds. Several membership campaigns have been conducted with war mobilization as the basis of appeal. Dayton has just secured fifteen hundred members with a largely increased membership fee. Mason City, Iowa, with a population of 16,000, brought in over six hundred new members and increased its dues from \$10.00 to \$25.00 a year for the purpose of equipping itself to handle its new responsibilities. In Minneapolis the necessity for cooperation in national affairs was emphasized in a four-day campaign which resulted in an increase in the membership of the Civic and Commerce Association from three thousand to about fifty-five hundred. St. Paul, although it secured over a thousand new members less than a year ago, in a recent membership campaign added another five hundred to strengthen its association for war purposes. These organizations have put up squarely to their communities the importance of co-ordinated effort to meet the nation's need and have met with this response.

There are certain contributions which Uncle Sam calls upon every community to make. Each community should be able to look to its central organization as the

logical agency to meet the demand. Not always is the machinery controlled by the organization itself. Sometimes the work is of a character which can better be performed by another existing body, or by a specially constituted committee, as in the case of the Greater Dayton Association, which has organized a city-wide committee on the war situation made up of representatives from every organization in the field. It will usually be found, how-

ever, that the commercial organization has been primarily responsible for, or has had a large part in, developing the necessary machinery. Usually the men who have received their training in organizations of this character are the ones who are relied upon for leadership. A large proportion of the men who have been called for voluntary service at the national capital are those whose training and inspiration have come through work with their local organizations. Such men as Bascom Little and Frank Scott, of Cleveland; Julius Rosenwald and A. W. Shaw, of Chicago; Edward Filene, of Boston; Walter Parker, of New Orleans; Julius Barnes, of Duluth; Frank Staley and C. A. Prosser, of Minneapolis, who are rendering invaluable voluntary service, are examples of this large and ever increasing group.

Every city and hamlet has been called upon to furnish its quota of fighting men. The Cleveland Chamber of Commerce distributed posters among retail stores and manufacturing plants, calling for volunteers for the army, navy and marines. This organization established a central recruiting station for all branches of the service in the Public Square; patriotic recruiting meetings were held in tents in every ward in the city; slides were displayed in moving picture houses and a fife and drum corps composed of Civil War veterans played at the central recruiting station. The organizations in Chicago, Minneapolis and St. Paul arranged great preparedness parades in which regular army troops, volunteer organizations, Red Cross contingents and Boy Scouts took part. In Minneapolis and St. Paul the commercial bodies have organized Civilian Auxiliary regiments. The regiments consist largely of men above conscription age.

The activity of these regiments had a decided effect upon recruiting and in awakening enthusiasm for preparedness. These organizations have been used as the nucleus for the home guard and have served in several local campaigns. In these and in many other cities posters and newspaper advertising have been supplied and personal canvasses for recruits have been undertaken.

**T**HE associations in Youngstown, Chicago, Minneapolis, St. Paul, Fargo and other cities have held themselves largely responsible for providing relief for the families of soldiers. In Minneapolis and St. Paul a labor bureau created by the commercial organizations secured six hundred jobs for militia men returning from the border, who had not yet been called out for war service.

This is a war of food, no less than of men. Hundreds

**N**EVER before has the nation realized so keenly the value to it of organized community effort. Officers and past officers, directors and committee chairmen of commercial organizations, whose records are known in their communities for unselfish leadership, have been drafted by the government. Commercial organizations are leading their communities in getting done the things the government wants done. They have sold liberty bonds; they have secured Red Cross money; they have gotten recruits for the army and the navy; they have promoted increased food production; they have obtained labor for the farms; conducted campaigns to reduce food waste; organized home gardens; preached patriotism, and helped educate their publics to the serious meaning of war.

And the end is not yet. Calls on commercial organizations will be continuous and increasingly insistent.

Has your organization adjusted itself to these conditions? Does it stand ready,—not only as to intent but as to equipment,—to answer the certain call? Look to it; when the history of the Great War is written the chapter dealing with the country's commercial organizations must record not only the unselfish patriotism but the executive leadership for which American business stands.—Editor.



of community bodies have organized back-yard and vacant lot gardening. Every city has a large potential asset in its vacant lots, its back yards and its men, women and children who have the time and inclination to work the land, if they are given the opportunity and shown how to go about it. In Oklahoma City the Chamber of Commerce has employed an expert horticulturist as a supervisor for community gardening. He has prepared information for amateur gardeners which has been published in the leading papers. A special number of the Chamber of Commerce News was devoted entirely to gardening. A paid worker of the Youngstown Chamber is directing an overall brigade of six hundred people who are working in war gardens which were fertilized and prepared without charge by the Chamber of Commerce. The agricultural development committee of the Cleveland Chamber, co-operating with the Mayor's Advisory War Committee and the County Farm Bureau, have purchased and distributed forty-five hundred bushels of seed potatoes. They are carrying on farm demonstration work throughout the country about Cleveland. They have organized a Farm Reserve composed of Cleveland business men with farm experience, which is planting, cultivating and harvesting the crops on a thousand acres. The Mankato Chamber of Commerce has offered prizes for the best gardens raised by boys. A committee of the Chamber of Commerce of Ashtabula, Ohio, has raised funds for similar activities. The Cincinnati Chamber of Commerce called together a dozen different war garden organizations and coordinated them in a Food Conservation Committee under the direction of the County Agent.

**W**ONDERFULLY efficient organizations have been created everywhere for securing Liberty Bond subscriptions and Red Cross funds. The commercial organization usually has been responsible for the development of these campaigns. The president of the local body has frequently been chairman of the campaign committee and the secretary its executive while the campaign has been handled or the machinery developed by the office of the community organization. In Minneapolis, the Civilian Auxiliary was given the responsibility of raising the Red Cross funds in the business district. This organization turned out in uniform and in two days covered every business establishment. The regiment held a noon-day luncheon and a parade headed by its life and drum corps. During the parade, when crowds filled the sidewalks, the command "Deploy as skirmishers" was given and the men suddenly scattered among the crowds and bombarded them for Red Cross subscriptions. The original quota for Minneapolis was \$400,000.00. The total amount raised, with the cooperation of the women who covered the residential district, was \$755,000.00. In St. Paul, the Auxiliary undertook a similar campaign for the Liberty Bond, and in a four day drive secured forty per cent above the quota assigned.

A number of city organizations are now taking a man power census of the community. This will produce accurate information of every artisan, mechanic or tradesman in the community whose productive ability may be made available for the Quartermaster's Department. These and

numberless other activities offer a program for every commercial body which seeks through its constituents to render the nation service essential for winning the war.

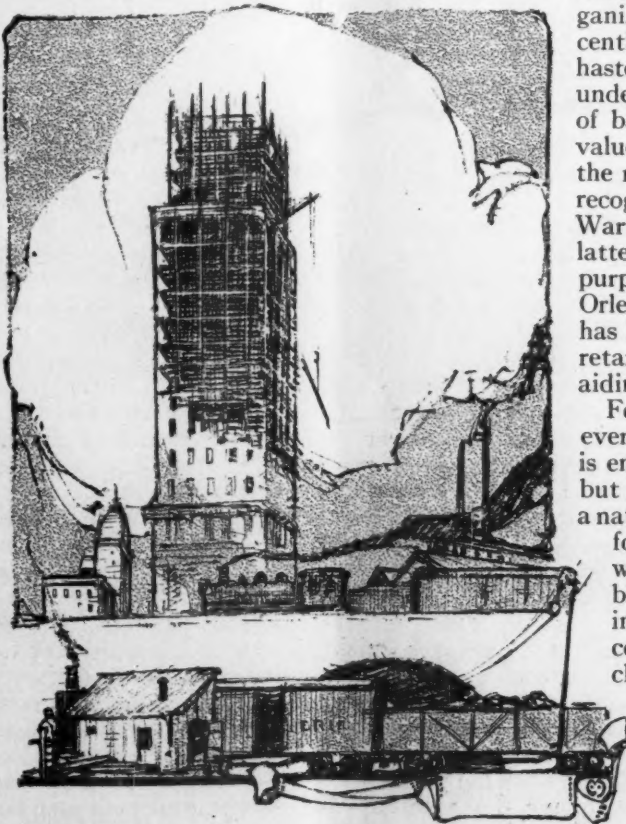
Some communities, because of their location or economic development, are peculiarly fitted to make a special contribution. The cities which serve as distribution centers for the great food producing areas have a responsibility for agricultural mobilization which surpasses that of any other service which they can possibly render. In the early spring the Minneapolis Civic and Commerce Association issued to post-offices, railroad stations, creameries, banks, commercial clubs, and other centers of congregation, and to influential farmers, fifty thousand posters and letters calling attention to the supreme importance of planting a large crop acreage. These were issued under the United States government frank of the College of Agriculture by the authority of the Department of Agriculture. This campaign was followed up by local organizations and many sections reported a ten per cent increase in acreage planted. The Minneapolis Association also, in cooperation with the Minnesota State Public Safety Commission, organized a labor bureau which is supplying farm hands for harvesting the crops, and laborers for strategic industries. The bureau is advancing railroad fare to farm hands and is now supplying laborers and mechanics at the rate of one hundred and fifty a day.

Cleveland, as a great shipbuilding and industrial center, is helping through its Chamber of Commerce to speed up work in shipbuilding plants and is advising Cleveland manufacturers with regard to contracts for certain lines of government work. It is also endeavoring to develop industries to manufacture certain lines of goods required by the government. So in coast cities, Atlantic and Pacific, chambers are rendering similar service to their shipping interests.

Prospects for renewed navigation upon the Mississippi and other navigable rivers have for many years commanded the attention of the business men of the Mississippi Valley cities. The commercial organizations in these cities have recently organized an association for hastening this development and will undertake the formation of a fleet of barges to handle freight. The value of our rivers as an adjunct to the railroads for freight carriage is recognized by the Departments of War and of Commerce and the latter is supplying barges for this purpose. The Secretary of the New Orleans Association of Commerce has been called as assistant to Secretary Redfield for the purpose of aiding this development.

For the first time in fifty years every citizen in the United States is engaged in the same business, but for the first time in history has a national crisis found an organized force in most every community which is able to mold and mobilize for effective service the business men of the country. The commercial organization cannot claim the sole, or perhaps even the principal responsibility for the marvelous results which are being produced, but the business men's organization can well maintain that the unparalleled way in which our com-

munities have risen to these new and great demands is due to the fact that the citizens have learned through their voluntary organizations to subordinate individual interests and as one man to think in terms of the common welfare.



# The Case for the Trade Acceptance

It Is No Business Cure-All, but It Will Go Far toward Converting the Nation's "Frozen" Commercial Credits into Something Active and Negotiable

By LEWIS E. PIERSON

Decorations by CHARLES E. HOWELL

THE extraordinary change which is taking place in our national attitude towards commercial education forms an almost ideal setting for an intensive campaign in the interest of the development of the trade acceptance in the business of the country. The change is going on rapidly and already has accomplished wonders by developing in a more receptive new ideas, particularly those of foreign origin or the national mind attitude towards development. Several causes produce this effect, natural process of business evolution such as frequently goes on unobserved for years and suddenly produces results which appear to have sprung up without the slightest warning: another, a growing recognition of the fact that the business of the world now is our business and that our business methods, in order to serve even our domestic interests, must be adjusted to world conditions and world needs rather than to those of a purely local character; and still another, the greatest of all, probably more strongly bearing upon this change than any other, the war, with its newly created needs and its irresistible demands upon every source of national strength.

It would be impossible to over-emphasize the importance or the directness of bearing of this war upon our national resources or the methods by which these resources must be treated. The big facts of the situation are clear and unmistakable. Before them the fictions of times of peace and even the lesser facts must yield. Arguments based upon theories of neutrality, of non-interference, of a peace we now know to have been impossible, of a national wealth able to protect itself without effort on our part, have vanished at the first breath of war—the first touch of national danger. Artificial obstacles which kept us from recognizing the possibility of national peril have gone and scarcely a trace of them remains. The ultra-conservative, the man who was unable to see American interest beyond national boundaries, the man whose attitude towards the countries of the world was based upon either traditional prejudice or selfish indifference—all of these have disappeared. In their place is found a generally uniform, broad-gauge type of American world-citizen, who realizes that a simple, placid, safe, and easily controlled American situation suddenly has become a highly complicated, much disturbed and exceedingly dangerous world situation, whose

effective treatment demands the application of the highest possible quality of business acumen, backed by the most comprehensive and forceful statesmanship.

It is impossible to grasp the psychology of it all, or to account for the phenomenon presented. We only can accept the unmistakable facts. Nations and flags and interests and sentiments and characteristics have been thrown together in a manner quite startling to the man who reads history and takes it seriously. Human selfishness may not have entirely disappeared from the earth, but at least it has been crowded into the small corner of human affairs in which it belongs. The Frenchman, the

Britisher, the Belgian, the Russian, and our other Allies, strangers though they may have been in the past, now to us are men seeing world things as we see them and fighting in defense of the things for which we fight.

Men and institutions and nations in some wonderful way have come together, anxious, apparently, to discover in each other not points of difference as formerly, but of similarity.

Employer and employee appear to have slowed down about their respective "rights" and "responsibilities," and are getting nearer to a realization of the fact that as regards the nation, their interests are identical. Production, commerce, finance, government have become united, because in disunion they see the shadow of failure—of destruction. Fear, timidity, conservatism, caution even, have gone and there is in the situation in full control a clearly expressed determination to go ahead and, cost what it may, to vindicate the position we have taken in this world crisis. Just what the impelling motive back of it all is to be called—where it came from—who furnished it—nobody seems to care. It is world property now and each just nation has made it its own.

The trade acceptance is not one of the big things of this war situation of ours, but it is not without great importance as a supplement to the really big things. It is not indispensable to our success either during the war or afterwards, but the achievement of success now and hereafter will be made much easier and much more nearly certain by its employment.

It would be a great mistake and a great injustice to the acceptance itself and to its possibilities of usefulness to claim for it any quality of merit which might be expected to accomplish commercial or financial miracles—which would make a dollar do more than a full day's work each twenty-four hours—which would make an obligation to a creditor appear less serious than it really is—or which, in



The use of the most scientific expedients will be necessary if we are to fill the wants of the world



any other way, would disturb the normal relations which exist between the different details of commercial transactions.

The most which consistently can be claimed for it is that when a particular transaction of purchase and sale has reached a certain point—that is, when it becomes settled between two people or concerns that one of them owes to the other a definite sum of money, due upon a definite date, the credit obligation resulting can be expressed in trade acceptance form more simply, more safely, more economically and with less disturbance or embarrassment of proper interests than can be done in any other form with which the commercial world is familiar.

In proof of this contention, we have our own wide experience with the acceptance in the earlier days of the nation's commercial development, and also the unqualified endorsement of business and commercial communities and financial institutions in England, in France, and in other countries which for many years have studied the commercial credit problem and which long ago decided that the easiest and best solution for some of its features at least is found in the employment of the acceptance method.

At this point it might be well to state definitely just what the trade acceptance is. It is believed that this cannot be done more effectively than by quoting the definition given by the Federal Reserve Board, which is as follows:

"a bill of exchange \* \* drawn to order, having a definite maturity and payable in dollars in the United States, the obligation to pay which has been accepted by an acknowledgment, written or stamped, and signed across the face of the instrument, by the company, firm, corporation or person upon whom it is drawn; such agreement to be to the effect that the acceptor will pay at maturity, according to its tenor, such draft or bill without qualifying conditions."

To this might be added that the purpose of the acceptance is confined to credit obligations arising from the purchase of goods; that it must be unconditional, that it must be for a definite amount of money and that it must possess a definite maturity. Possessing these qualities, the acceptance is entitled to full re-discount privileges at Federal Reserve Banks and at preferential rates.

There are a number of different grounds upon which the general use of the acceptance can be justified. It helps the buyer by enabling him at all times to measure his obligations and thereby avoid unconscious over-extension of business. It helps the seller by making collections easier and more regular, and by relieving him from the burden of financing transactions which virtually should finance themselves and by logically shifting the burden of proof concerning deliveries, quality, etc., to the person possibly questioning their correctness—the buyer.

It helps business generally by developing a better attitude towards commercial obligations; by creating a better class of commercial paper and one more nearly approximating the commercial condition of actual currency; by promoting the development of re-discount facilities and the standardization of their methods; by making commercial credit available for purposes which

otherwise would involve the tying up of cash or collateral; by transferring "frozen" credit into self-liquidating acceptances, thereby keeping commercial resources in most highly liquid condition and reducing their mobilization to the simplest form.

The immediate present national importance of this quality of high availability of resources can hardly be overestimated. Never before has unavailable value occupied so undesirable a position, and not in history have our national resources been subjected to such a strain as now, nor is it likely that ever again they will know such a test. There is no question about our ability to furnish the soldiers and guns and ammunition and ships and money required to equip ourselves for a reasonable period of war, and to fully supplement the equipment of our Allies. But if the worst comes and the war should stay with us five years—what then? May we not reach the point which already has been reached by the warring nations of Europe? The point of material exhaustion, where only desperation and almost superhuman ingenuity keep the machinery of war up to a point of reasonable efficiency?

It is not enough that we are able to point to certain striking evidences of power—not enough that we possess great stocks of gold, not enough that our resources are

practically inexhaustible. Under the demands of war, gold may pour out even as it poured in, and the only resources which represent value in times of war or stress are those which are easily and readily available. There can be no possible question as to the temper of our people or their patriotism or the price they are willing to pay for victory, but this fact, important and gratifying though it be, forms only a part of our situation. The great problem is found in the task of combining national sentiment and national resources in such a way as to provide an effective condition of preparedness which will serve not remote and general, but immediate and specific purposes.

The first test of our national power has assumed the form of a demand for Seven Billion Dollars—not in general resources or credit, but in cash—not at our leisure, but now—not during a period of commercial ease and relaxation, but in the biggest high pressure times the country ever has known—when every factory must work overtime; every field be cultivated to the limit; every mine yield as never before; when ships must be built and railroads operated—all costing more money than ever before has been invested in production by any country, and all in obedience to the same demand which requires the Seven Billion Dollars—the demand of the present world war.

This money must be secured here in the United States, not from our friends abroad. There is no foreign market in which we can borrow, or in which we can sell securities. Even selling our products abroad does not help very much in the emergency, as our principal customers also are our Allies, and if they buy from us, we must lend them the money with which to pay. It is necessary then that as a



purely domestic matter, without troubling even the best disposed of our foreign friends and without in any way interfering with either the normal or present extraordinary activities of the country, we produce this immense sum.

In the face of this first serious war test, and with the suggestion of others not less severe to follow, we cannot fail to recognize the imperative necessity of relieving the national situation of every element which tends either to restrict production or tie up value. The person who, in a spirit of selfishness or even indifference, hoards his money at a time when patriotism demands that self interest yield, is not worse than the other who, in his business operations, employs methods which result in tying up capital or value in excess of what is reasonably necessary. The business man who accepts a lower rate of profit than his business normally is capable of yielding, is not more guilty of bad business than is the other, who allows credit obligations growing out of thoroughly live business transactions to be expressed in inactive and cumbersome open book accounts instead of in active trade acceptances, fully eligible for re-discount and capable of moving in the country's commerce, practically upon a currency basis.

If, then, a condition of true preparedness is to be secured and the national wealth is to be put into such form that in times of stress and danger it will constitute a mobile power, capable of effectively backing up the national sentiment, radical changes must take place in certain of our business methods. The antiquated and illogical open

book account must go, and with it the careless, indefinite, extravagant business methods which have grown up in its atmosphere. The promissory note, once an eminently respectable means of expressing an open obligation, but

which has been used for such a miscellaneous assortment of purposes that it has wandered far from its original purpose, must be brought back again to the field in which it belongs. A larger proportion of the nation's commercial credit must be converted into active value and sufficient eligible commercial paper must be produced to justify the effort which has been expended under the Federal Reserve System in providing complete national re-discount facilities for just such emergency purposes as now must be served.

There is no argument against the use of the trade acceptance in its proper field, which can impress the sound, broad-minded man who is willing to pay his own debts promptly when due and who recognizes the indispensable quality of prompt payment by others. It represents the possibility of assistance all around—the buyer, the seller, the banker, business generally, the nation—all come in for a share of the benefit which the employment of this simple and obviously sound and meritorious method assures.

The success of the establishment of the acceptance in business generally will be measured by the extent to which business men in all parts of the country concern themselves in the active promotion of its interest. The work of education already started must be carried on actively and intensively. The inertia resulting (*Concluded on page 49.*)

#### Open Book Accounts —vs.— Trade Acceptances

Not payable on any definite date.  
Payment easily put off and waste in bad accounts is tremendous.  
Not "quick" assets and therefore not a good basis for credit.  
Liable to dispute and in case of suit must be proven correct.  
Discountable for only about 50 per cent of their value.  
Tie up the seller's invested or borrowed capital for indefinite periods.  
Costly in collections, extensions, trade discounts and abuse of sale terms.  
Necessitate the seller borrowing on his promissory notes to carry the financial burden of the buyer.  
Tempt creditors to go too far in extending easy terms to buyers.  
Incur heavy office "overhead."

Promise to pay on a certain day.  
Do not tie up capital for indefinite periods.  
Acknowledge the receipt of the goods and prove the correctness of the seller's claim.  
Discountable at the bank and re-discountable at the Federal Reserve Banks at low rates, without limitation as to amount.  
Improve rather than detract from the credit of the buyer.  
Conducive to careful purchasing.  
Tend toward lower prices and more satisfactory terms for buyer.  
Most liquid paper obtainable by banks.  
Make the buyer who can't take cash discounts better able to compete with the cash buyer.

## SOME WELCOME TRADE CASUALTIES

War Necessity Is Killing Off such Bad Business Customs as Left-Handed Plows, Hair-Line Coal Grades, Poor Loading, Discount Abuses and a Host of Their Dangerous Companions

By ANSELM CHOMEL

ONE result of the war, it seems probable, will be to revolutionize business methods in the United States. Significant changes are taking place; customs sanctioned by age are disappearing. Manufacturers and jobbers, retailers and private consumers, producers of raw materials and those engaged in transportation—all will have to adjust themselves to new conditions.

Many innovations are war measures, and will pass with the war. But, springing from the same cause, practices are being adopted which may become part and parcel of our commercial system, practices which certain forces in commerce and industry, in their efforts to introduce new ways of doing business, had long sought, but with little success, to bring about.

The fundamental fact is that a radical alteration has been effected in the relations between buyers and sellers. Heretofore the merchandise market has been controlled by buyers; now it is controlled by sellers. Demand, generally speaking, ruled; now it is supply. Formerly there was no shortage of labor, materials or manufactured articles, competition between sellers was keen, and buyers accordingly were in position to say what should be manufactured and the conditions under which it should be sold.

Then came the war, opening greater foreign markets to our goods, and gradually developing the new attitude of sellers,—as appears from the story of the watch manufacturer and the jobber.

Before the war, this manufacturer courted the jobber and coaxed him to buy watches. At the beginning of the 1916 season, however, this is what he was saying to him:

"We have made a careful inventory of the labor and materials which we shall probably be able to get this year and have estimated the number of watches we can make. Our output has been apportioned among our customers on the basis of their average yearly purchases. We have allotted this many to you. After we have supplied that number, we will not promise to fill any further orders."

Between the lines the jobber read—"Here is what you can have; take it or leave it. If you do not buy on my terms, someone else will"—and felt that the scepter had passed from his hands.

A jobber, elucidating the statement that we have exchanged a buyer's for a seller's market, said:

"We jobbers—I am speaking now as a buyer—have to make the best we can of conditions which we would not have put up with a few years ago. Take one of our standard articles. It has been our custom to estimate



at the beginning of the season the amount of stock we would require, and on that estimate manufacturers have quoted prices for the whole year. Last year such quotations were made, but some time later the manufacturers advised us that as they had now supplied us with the amount of goods we usually bought in the course of a year, they considered themselves no longer bound by the price named, and any further orders would be at an advanced figure. We were helpless in face of such treatment then; we are doubly so now."

THE effect of this lodging of control in the hands of sellers will not be merely to alter their relations with buyers. It will mean that all of us will change our habits more or less. For one thing, we will use more standardized articles. Our individual whims will not be so much consulted.

The campaign for standardization, one of the first manifestations of the movement for new business conditions that preceded the war, is receiving enormous impetus as the result of the present situation. As in many other pioneering enterprises, wagon wheels helped to blaze the trail.

Wagon makers had been turning out something like forty different sizes of wheels. One day they came to the conclusion that there was no reason why Farmer A should not haul his grain to market in a wagon the wheels of which were the same width as those of Farmer B. An eighth of an inch difference did not seem important to anyone but Farmer A. Also, they wanted to know, why should Farmers C, D, E and F each have his pet width?

So they began to make standard wheels, effecting a saving in machinery, labor, materials, stocks of goods, warehousing space, and so on. And grain is going to market as well as in the days when it travelled on forty varieties of wheels.

Implement men are taking their cue from the wagon makers. Why, they ask, manufacture sixty kinds of plows when there is no essential difference between them? Farmer A demands an extra bolt; Farmer B will not have a plow with such a bolt. The bolt is unnecessary, say the manufacturers. If Farmer A must have it, the village blacksmith is the man to put in on. And why, they ask again, should the farmers of Ohio insist upon left-handed plows when every other state in the Union wants right-handed ones?

The president of a corporation engaged in the manufacture of farming implements interpreted the matter in the light of the present-day situation:

"When I heard what the wagon makers had done, it came to me that that was the very thing for us to do. I saw the great waste of the old system, a waste that did nobody any good.

"Consider what standardization means in our present crisis. Steel is needed in enormous quantities to carry on the war; needed by us and by our allies. The supply will be less than the demand. Now the making of sixty kinds of plows instead of one—to take only one instance among farming implements—causes us to carry great quantities of steel in stock that otherwise would be unnecessary. If we withdrew \$100,000 worth of steel from war uses to humor our customers, we would be guilty of an unpatriotic act.

"But patriotism aside, we shall probably be fortunate if we get steel enough to supply our customers with even standardized articles."

When the United States, before going to war, made an inventory of its industrial resources, it was discovered that something like 70 sizes of bolts, where one would have served every purpose, were used in the construction of the different types of aeroplanes manufactured in this country.

Styles in coal have been more numerous than those in bolts, as was brought out when it came to pooling shipments in order that our transportation facilities might be able to supply us with the amount of fuel that we must have.

Two pools have been established, one to serve points in the Northwest, the other New England. Their function will be similar to that of banks. A shipper's coal will not be kept to itself, but will be thrown into holds of vessels with other shipments of the same class. It is essential that there be as few grades as possible, else no saving in either cars or vessels would be effected. Hence shipments are to be standardized. The fact that one was mined by a left-handed man and the other by a right-handed man will not save them from a common dumping ground. Nor the fact that operators have adopted arbitrary trade names where no real distinctions exist. The Tidewater Exchange, serving New England, will cut down the number of classifications from 1,166 to 41.

More than 9,000,000 additional tons of coal a year will be moved, it is estimated, by the saving in vessels and freight cars which will result from this elimination of grades which are not grades, by the two exchanges. Stated another way, it will mean adding something like 200,000 cars to the country's equipment and increasing the tonnage of vessels.

The new ideal in commerce and industry, quickened by war, is to use every resource to its utmost capacity. Coal will serve as a further illustration.

We have it on the word of Van H. Manning, Director of the Bureau of Mines, that last year we wasted 150,000,000 tons of coal, one-fourth of our entire output, through inefficient use. In the modern, efficient power plants of the country, 20 per cent of the heat in the coal consumed is converted into power, whereas in small power stations the efficiency frequently drops below 10 per cent. The coal wasted, according to Mr. Manning, was worth \$500,000,000, or one-fourth the issue of the Liberty Loan bonds.

The full freight car has come to possess as much significance as the full wheat bin. Heretofore shippers have contended with carriers to reduce the minimum amount of freight to be called a carload, with the result that many a car capable of carrying 60,000 pounds has been considered "full" when loaded with 30,000 or even 20,000 pounds. Now, however, the Railroad War Board urges shippers and carriers to load cars not only to their marked capacity but even 10 per cent in excess of it, a measure which it is believed will be equivalent to adding to our equipment approximately 200,000 cars.

THE Pennsylvania Railroad Company estimates that a plan for the more efficient handling of less than carload freight which it will shortly put into operation will be the means of saving at least 1,000 box cars a day on its lines east of Pittsburgh and Erie.

A complete change will be effected in methods of receiving, loading and forwarding less than carload freight of all descriptions. The plan will constitute probably the most far-reaching improvement that has ever been attempted on a large scale in freight transportation practices.

The present custom of receiving small shipments at any time of day, for all destinations, followed from the first days of railroading, will be abolished in favor of a plan whereby acceptance and loading of freight will be conducted according to a regular system. Such freight will be automatically concentrated into full cars at the point of shipment. The two most important features of the new method will be:

The inauguration of "sailing dates" on which cars will depart from various points of origin to specified destinations. Freight will be accepted on the proper shipping days only.

The designation of particular stations at which freight will be exclusively received for specified destinations; freight for such points will be accepted only at the stations named.

The company believes that it can eliminate the delay incident to the rehandling of freight under the present methods of consolidating small shipments into full

carloads at transfer stations and increase the number of cars available for commercial freight, as well as government supplies, by effecting better average loading than is possible under the transfer system. Furthermore, that the reduction in the number of car and train movements required to transport a given volume of freight will release trackage and locomotives for the movement of troops, government supplies and commercial freight.

Business innovations do not stop at standardization and getting the most out of the facilities at our command. They include a variety of commercial practices which, although having to do only with the distribution of goods, possess deep significance for the public.

The cash discount is a case in point. This practice had its origin in the desire of the seller to realize his returns as quickly as possible. This enabled him to finance his business out of his own funds to a large extent, reducing the amount of accommodation to be arranged for at banks.

In a case which will serve as an illustration, goods to the amount of \$1,000 had been sold on "60 days' time." Had the retailer known that he would have to pay \$1,000, whether he settled immediately or at the end of 60 days, he would have waited until the last moment. In order, therefore, to induce him to make early settlement, the jobber offered a cash prize of 2 per cent if he would pay within 10 days. The retailer did not pay until 20 days after shipment of the goods. Being a man who "always discounts his bills," he settled on the basis of \$980.

Sellers have not required buyers to remit in full under an agreement to return the amount of the cash discount if payment is made within the time specified, but have permitted them to make the deduction themselves. They have placed buyers in the position of a small boy left in a room with an apple which he has permission to eat provided he performs a task within a certain time, but who knows from past experience that he probably will not be punished if he eats the apple but leaves the task undone.

Now, however, both manufacturers and jobbers are carrying on a crusade against the unearned cash discount—manufacturers against jobbers, and jobbers against retailers.

Companions to the unearned discount exist in canceled orders and returned goods. It has become common for

sellers to encourage buyers to cancel orders and return goods in order to gain favor with their customers. They use their indulgence as a selling argument. Salesmen, for their part, have encouraged the practice in order to swell their records of sales.



## Another Viewpoint

By STRICKLAND GILLILAN

**I**N fearsome tales "the wicked rich" are painted  
deadly black,  
Yea, nearly all who wield a pen have given them  
a whack.

Some things that they have said are true—the rich  
are mostly human,

And now and then one slips a bit when business is boomin'.  
But we'd forget the men whose cash would buy the Koh-i-noor  
If we but saw the crookedness that keeps some people poor.

I used to know a merchant in a little country town  
Who might have gained a lot of wealth and subsequent renown,  
Had not his grasping methods driven half his trade away—  
They said he'd "skin a house-fly for its tallow any day".  
His lying scales and labels made him enemies galore,  
But still he hugged the crookedness that kept him always poor.

'Twere folly to discredit all the meaning of the years—  
The lore embodied in The Word and vouched for by the seers.  
Material welfare oft rewards men not of our own kind,  
And poverty through honesty we now and then may find,  
But we would call our bloodhounds from the rich offender's door  
If we could see the crookedness that keeps some people poor.



he borrowed them, as a woman borrows plates and spoons from her neighbor when she entertains. After the "grand Easter opening," they were shipped back to the wholesaler.

The expense of receiving, handling and conditioning returned goods, jobbers say, is far heavier than that of selling, filling orders and shipping the merchandise in the first instance. This cost and the depreciation of the goods amount to fully 25 per cent. Old, shop-worn merchandise that is sent back finds its way to the job counter, where it is sold to second-hand dealers at any price that offers. In some cases, goods are returned that cannot be sold at all.

These things in themselves may not seem impressive. Cash discounts—what are they but an affair between buyers and sellers? They add, however, to the cost of doing business and to the cost of commodities.

And as to multiplicity of styles, canceled orders and returned goods? They suggest a prodigality which reminds one of what an Irish friend of Dr. Johnson said to the Autocrat of Fleet Street:

"Every orchard ought to produce enough fruit to be eaten, enough to be preserved, enough to be stolen, and enough to rot on the ground." (Concluded on page 48)

"In some industries," to quote a speaker at a convention of the National Association of Garment Manufacturers, "I find that the volume of cancellations, returned merchandise and refused orders runs from 15 to 20 per cent. In other words, when you adjust your factory output to meet the requirements of \$100,000 worth of business, you may actually net only \$80,000, and you face the necessity of disposing of the \$20,000 shrinkage at a loss."

The effect of these practices in the shoe industry is said to be so serious that several firms have been driven from business in recent years by losses met in this way. According to an authority, the following is a typical case:

A shoe dealer, anxious to make a showing at his Easter opening, ordered more goods than he could hope to sell. They made his store look big and added to the display in his show-windows. He didn't buy the shoes;



# TRIUMPHANT COTTON

## Ignored When War Began, This Wonderful Southern Plant May Hold in Its Bolls Victory on the Battlefield and a Key to World Trade After Peace Comes

By AARON HARDY ULM

A GERMAN statesman is quoted as saying that the last crust of bread will win the war. It is up to some other phrase-maker to remark that the last lock of cotton may administer the licking. The war could not be fought without food for the troops; neither could it be fought without cotton for both the troops and the guns. It clothes and helps to feed the first and supplies practically all sustenance for the latter. America is to furnish only a relatively small portion of the food, but more than three-fourths of the cotton.

Oddly, this same cotton, now of such pressing importance in the world game of shot and shell, was regarded by Mars at the beginning of the war with an indifference amounting to scorn. The Germans, alone, recognized its tremendous importance. During the first six or eight months of the war, Great Britain permitted cotton to go freely into Germany and the Germans bought liberally and stored against a possible day of reckoning, and it may be—note I say it may be—that the war is still going on by reason of that inflow of cotton. Much of the German protest, which singularly was aimed particularly in this direction—against the British embargo was because of cotton more than of food. For the barring of cotton caused German cannon to be threatened with starvation, which was more dangerous than the threat of food starvation. Germany produces food but no cotton.

Three years ago, as the great war was starting, cotton was marketless. Not only that, but it seemed to be hopeless. Its career since that time goes to prove that there are more things in heaven and earth than are contemplated in the philosophies of the best economists and the shrewdest so-called experts. For scarcely a person expected cotton to regain its full place in the markets of the world, at least for a long time.

"Who is to buy it?" they asked. "In Europe everybody is fighting and they will have no money to spend for clothes. It will take all their resources to get food."

The doors of the cotton exchanges were bolted, and what ordinarily was a billion dollars' worth of the staple piled up on Southern farms, being apparently about as valueless as the dead leaves of autumn.

The boom of cannon sent the wheat markets skyward and drove cotton to the doldrums—though the boom itself was of cotton.

Back there in late 1914 the cotton mills prepared to retrench; some even made ready to close down; for the "outlook" was bad, very bad.

Strangely, orders continued coming in; and they were hurry-up orders, too; and in a jiffy the disconsolate mill men found themselves with more business than they could handle at better prices than they had ever known.

It took the cotton world a year or more to awake to the fact that the little more than a hundred years of the staple's commercial history have rendered cotton not only a peace but a war necessity of an importance perhaps equal to that of grain.

For, could you  
the world, the  
pend, or  
now con

destroy all the cotton in war soon would end, suspense continued on lines sidered ancient. The big guns would be silenced, few aeroplanes could soar, perhaps no U-boats could dispatch their messengers of death; and, though the troops have demonstrated that humanity can still endure a lot, men could not scamper around the trenches in nature's garb.

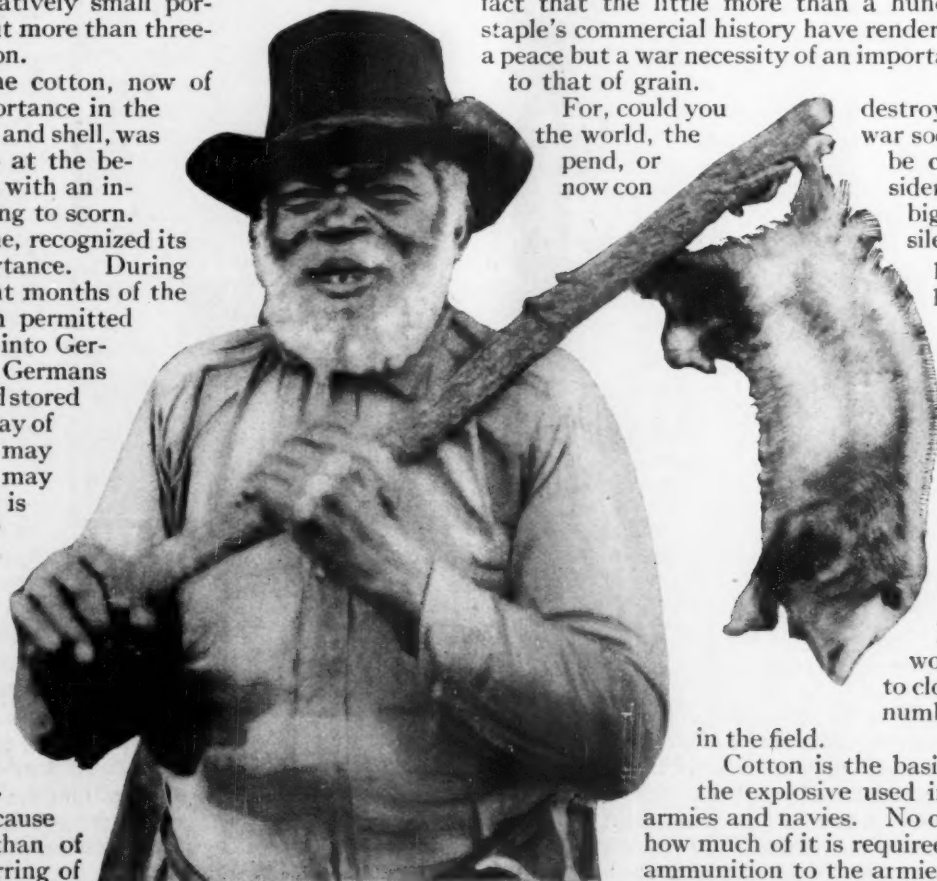
But for cotton it would be impossible to clothe one-fourth the number of soldiers now

in the field.

Cotton is the basis of nitrocellulose, the explosive used in the main by all armies and navies. No one can tell exactly how much of it is required to supply needed ammunition to the armies and navies. We do know that the United States is now turning it into powder at the rate of nearly a million bales a year. Linters and hull fibre are employed chiefly in this country and in France. Great Britain uses cotton waste.

What is Germany using? That country has had no recorded cotton imports for about two years. British chemists estimated in 1915 that a year without cotton would force Germany to her knees. Now, it is said, German scientists have found means of substituting wood fibre for that of cotton. If this be true, the powder must be less powerful and less durable. It is not of necessity true, for Germany may possibly yet obtain a limited supply of cotton from Turkey. It is also to be noted that, after the British embargo was made to include the staple, our exports to Scandinavia greatly increased.

The thing an Easterner or Westerner on his first trip to the South wants to see is cotton in the making. It is hard for those who haven't seen it to visualize something very close kin to wool growing on a plant that sprouts from the ground. The cotton plant but for its plentitude would be a curiosity of botany. Its history antedates maize or Indian corn. The most ancient of writers refer



"What's all dis yere talk 'bout trouble in de worl', wid cotton sellin' at two bits a poun'?"

to it. It has charmed singers from the Rig Veda hymnists to Sidney Lanier. The Hindoos cultivated it 3,000 years ago.

Contrary to the popular notion, it has been produced in virtually all lands and is a native of most. It can yet be grown, on varying scale of success, almost anywhere in the temperate or tropical zones. In this country, cotton has been cultivated as far north as Illinois and Indiana. The rarest variety is peculiar to Peru, where exhumed mummies wrapped in it prove it has been grown and used since the beginning of known time on this hemisphere. Though the Peruvian crop isn't large, the quality of the product fitting it for use instead of wool, causes it to be in great demand. We import much of it.

Conditions, natural and economic, have given the Southern States of America a practical monopoly of the production of raw cotton since the cotton gin and the spinning frame put the product into general commerce. There is much romantic legend associated with the introduction of cotton in the South; but it is probable that some species grew there before Capt. John Smith set foot on the continent at Jamestown. In truth, the Sea Island varieties which constitute cotton's aristocracy are believed to be indigenous to the South. This cotton has been selling around 50 cents a pound.

Cotton and the South have been largely synonymous terms for nearly a hundred and fifty years. The plant made slavery profitable and, very likely, it was because of the fear that free labor would force the South to give up its monopoly, that the American Civil War became inevitable.

Around the cotton plant, the old Southern civilization developed; about it has grown the New South, though modern development along varied lines has rendered the South largely independent of it. It is still the business barometer of the section, and is the most potential single factor, not only in purely Southern affairs, but in the foreign commerce of the nation.

**W**E might never have engaged in world trade on an extensive scale but for cotton. It has constituted our chief export, and for decades was our only large export. For a long time it alone preserved our favorable trade balance. Prior to the present war, this balance amounted to from three to five hundred million dollars, being the value usually of our raw cotton exports. Cotton paid our debts to Europe; and practically was our medium of exchange with the world. During the ten years preceding the war, we carried on a foreign trade totalling \$20,000,000,000, on gold margins of a few millions, all because cotton balanced the books.

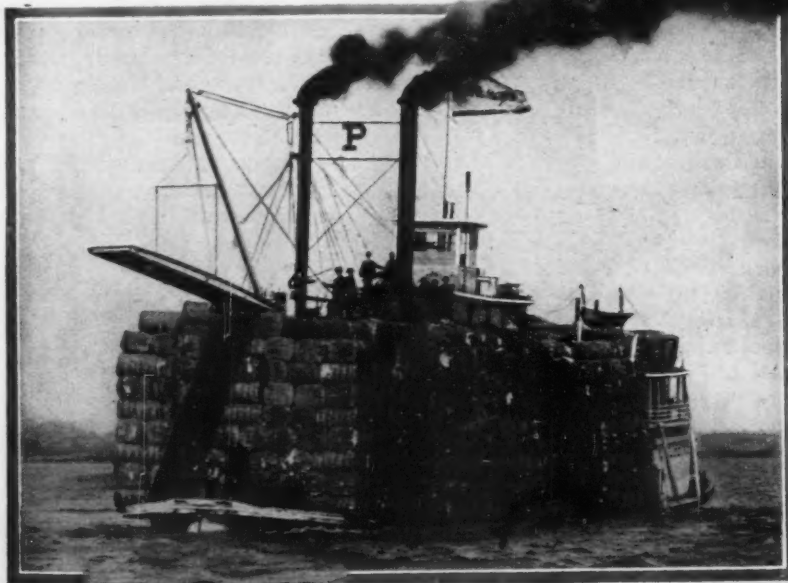
The war introduced a new era for cotton, as it did for most things. The crop of 1914 exceeded the demand by nearly 5,000,000 bales. But for that surplus, the world now would be in the grip of a cotton famine. For three years production has been below consumption.

"The world's production of commercial cotton, exclusive of linters, grown in 1915," says the United States

Census Bureau, "was approximately 18,650,000 bales while the consumption (exclusive of linters in the United States) for the year ending July 31, 1916, was approximately 21,011,000 bales."

Production for the last season showed little increase, though consumption continued to grow. The result is that the margin between supply and demand is still narrowing, and is now, at the beginning of the new cotton statistical year, scarcely more than sufficient for the normal operation of the trade.

The outlook for the new season, from the standpoint



In addition to its official position as a cloth and food producer, cotton and the river steamer have combined to form another industry of no mean proportions. They have their own school of song writers, singers and publishers. Synopsized description of steamers on the Mississippi and life on the New Orleans levee have been sung to a delighted world by American phonographs.

of quantity, is not hopeful. The official forecast is for an American crop about the size of last year's, which was some two or more million bales below consumption.

This accounts for the present high prices of cotton. At July quotations the South will receive nearly \$2,000,000,000 for this year's output, though reduced, or about twice as much as for any previous crop, barring that of 1916.

The reduced crop of 1917 is due largely to a substantial cut in acreage. Several factors entered into causing this reduction in the face of high prices. One large factor is

labor shortage. Another is the fact that the crisis of 1914 taught the farmers that the only safe course is to produce needed food stuffs at home. A third was the wide and emphatic campaign of propaganda for diversified farming begun long ago but reaching its climax only recently.

In his memorable call to sacrifice and service issued in April, President Wilson appealed specially to Southern farmers to grow more foodstuffs.

"They can show their patriotism in no better or more convincing way," said the President, "than by resisting the temptation of the present high price of cotton and helping, helping on a great scale, to feed the nation and the people everywhere who are fighting for their liberties and for our own."

Though cotton was quoted then at more than 20 cents a pound, cotton planting was cut a million and a half acres as compared with last year and 2,500,000 as compared with the high acreage record of 1913.

According to the Department of Agriculture, the South has increased corn acreage over 13 per cent, the increase for the country being 14.2 per cent. Southern states now have nearly a third more acreage in corn than in cotton! The South produced more foodstuffs in 1915 and 1916 than ever before; yet the increase of this over last year promises to be more than twenty-five per cent.

Yield of cotton per acre will probably be small because of the reduced quality of fertilizer, due to the potash famine, and unfavorable climatic conditions during the early summer.

This year's yield will be one or more million bales below



probable demand, which means that the operation of economic law should guarantee continued high prices for cotton.

Although 25-cent cotton is something few men now living ever expected to see, it is not out of proportion to quotations for other basic staples like steel and wheat. Indeed, it is under most of them. It has more than ratio value to the South, however, because the section will have to buy less food.

The high price contains an element of poetic justice, too, because cotton was the last among the big agricultural products to rise to levels to which war inflation quickly sent others. Furthermore, Fate in the past decreed that about one out of every three crops of cotton, perhaps one out of two, be sold at less than cost of production, because of supply exceeding demand.

Lowered production and enhanced demand have combined to place American cotton in a position of unusual commercial importance, and of immense potential value to the South.

Demand promises to grow. Only recently our government placed an order for 40,000,000 yards of cloth. Ammunition needs increase as the war progresses. The proposed aeroplane army will open up a large new demand. Much cotton is now used in the padded suits of aviators and may have to be employed for "wings" too. There is no likelihood that actual needs, or those that can't be otherwise met, won't be taken care of. The burden to date is more on the manufacturer than the producer. The new troops are to live in houses because of the difficulty of getting canvas for tents, due to the inability of mills to turn it out on time.

The pressure on the cotton manufacturing industry has been immense. Running spindles increased a million and a quarter during the last year. The South this year may manufacture over 4,000,000 bales of its own cotton, an increase of almost 100 per cent in six years. Present demand for goods might employ even a million or more additional spindles.

Will this state of affairs end with the war? Perhaps so; but very likely not.

The potentiality of cotton's position extends far beyond the war. This is the lesson of history. At the first sound of guns gold flees to cover and, conversely, cotton, gold's twin brother as a tonal constituent of commerce, flounders on a stagnant trade sea. As credit expands, gold cheapens; cotton advances. First concern is for food, and properly so; and cotton production declines and clothing products decrease.

**A**FTER peace food readjustment will be a simple matter. Food can be produced anywhere and transit from farm to table is generally an easy and quick process. Clothing readjustment will be difficult and complicated. Raw material in quantity is confined to a comparatively few localities, more than half of it coming from our Southern States alone. From farm to back is a tedious process.

Though the South is leading the world in volume of cotton manufactures, it looks to other sections and countries for much of its clothing. Cloth is shipped East and repurchased bleached; yarns go to Switzerland and return in the form of laces. Prior to 1914, as a nation, our cotton goods imports exceeded exports. We are still importing at the rate of \$50,000,000 worth annually, chiefly from Great Britain.

Despite the activity of the mills, the world's supply of clothes has been and is decreasing. The British fleet long ago silenced the spindles of Germany and Austria. Already there is an accumulated demand in Central Europe tantamount to 5,000,000 bales of cotton; for clothing needs, unlike those for food, can accumulate.

The cunning Japanese have taken advantage of the situation to make fierce inroads on the textile markets of the Far East—markets around which dominance of the Pacific revolves. Their purchases of American cotton have nearly doubled. However, though they are consuming yearly more than two millions of bales, less than a half million are coming from us. We buy much cotton goods from Japan and sell them none. Our cotton goods trade with China has fallen from nearly \$30,000,000 to less than \$1,000,000 in a little more than a decade. We have increased our cotton goods exports to South America by only a few millions; but the total of cotton goods exports have doubled in three years, amounting now to more than \$125,000,000.

We hold a position of immense advantage, with reference to the after-the-war markets. For the present, the world is dependent on us for raw cotton, and this dependency will continue for several if not many years following the war. Our mills are in superb shape to enter the struggle for world markets. However, the British have fought as valiantly to hold their textile trade as they have to maintain their place on the Western battle front. The loss of that trade would be an almost ruinous blow to the empire. They have

### COTTON ON THE BATTLEFIELD

**A** TWELVE-INCH gun disposes of a half bale of cotton with every shot fired.

A machine gun in operation will use up a bale in three minutes.

In a naval battle, like the one off Jutland, from five to six thousand pounds a minute are consumed by each active warship.

It takes more than 20,000 bales a year to provide absorbent cotton to staunch and bind the wounds of the injured.

One change of apparel for all the troops now engaged in the war represents more than a million bales.

One hundred thousand bales will be required to equip our proposed aeroplane fleet if cotton, as may be necessary, supplants linen for wings.

This country is now turning nearly a million bales a year into explosives alone.

### COTTON IN THE HOME

**T**HE cooking oil in which our morning egg is fried is made from the cotton seed.

The lard that leavens the breakfast biscuit may have come from it.

The mattress, the pajamas, the sheets, on, in and between which you sleep are of it.

In all likelihood the leather under the soles of your feet came from the cotton seed hull.

The "olive" oil with which you make tasteful your dinner salad very likely is more of Dixie than of Italy.

The tires on your auto, the cushions on which you sit and the top which covers you as you ride contain cotton.

Eliminate cotton, and most humans would return to skins or nakedness.

retained most of it.

In that commercial war of peace, for which all countries are at least unconsciously preparing, no trade will be so eagerly sought as that of textiles. For with that trade goes political and financial dominance. Its reorganization will rest upon the South's raw product. Peace may affect other products adversely but can only enhance the importance of cotton.

Cotton's great utility power is in that it has virtually no substitutes. Wool is a disappearing utility, silk and flax are negligible in the aggregate. Cotton can serve their purposes. Below cotton there is only—nakedness. Neither the animal nor vegetable kingdoms can suggest a competitor and scarcely a rival.

The New England farmer, as has been said, could cultivate it profitably for the seed alone. But if it produced neither seed nor lint the plant would still be nurtured for its blossom. The furtive bloom, with its shifting colors and delicate shadings, is such that were it not made

common-place by its more singular fruiting, it would be sought by floral connoisseurs.

"First day white, next day red,  
Third day from my birth I'm dead;  
Though I am of short duration,  
Yet withal I clothe the nation."

The eulogy of the old field verse is modest. The cotton plant clothes four-fifths of humanity. But clothing is only one of a hundred practical creature needs met by it. A recent Census Bureau report shows that nearly 40,000 bales are turned annually into bandages and other things for hospital and medical uses. The automobile industry consumes a hundred thousand bales or more; the electrical industry many thousands; there is scarcely an industry in which it is not employed.

But the uses of the fibre, though greatest in volume of consumption, do not approach in variety or novelty those for which the seed are employed. More nearly than anything else coming from the soil, the cotton seed can be made to meet all creature needs of man and beast. From the hull material is obtained for the manufacture of every article of wearing apparel from hats to shoes. Its kernal contains the elements of both bread and meat and actually is employed for both. It is entering into the food equation by supplying many things from lard for breakfast biscuits to oil for dinner salads.

Yet men now living recall when the seed were cast aside as a worthless nuisance, like saw dust. They now account for an almost exclusive Southern industry — with an annual output nearly a half billion dollars. worth

The South has in prospect a most gratifying, and at least for the next half dozen years, a dependable income from its cotton. Based on present quotations, the section should receive in the next six years more than \$13,000,000,000 from that one product. This would include the return for raw cotton and added values to cotton goods and cotton seed oil products manufactured there. It is a cash return, for cotton, alone of agricultural products, goes wholly into the markets. None is retained for home use. The total above amounts to nearly as much as the coinage value of all the gold produced since the discovery of America.

Cotton is singular in that, barring fire and water, it is imperishable. Time, perhaps, improves it. It was by reason of this quality that Secretary McAdoo, in 1914, justified Federal Reserve Bank loans upon it at more than current market value.

That quality permits indefinite holding. Heretofore the South has had to sell at prices fixed by Liverpool and New York because of its financial dependence on the money centers. During the past year Southern spots have sold above New York and Liverpool contracts. The South being able to finance the crop, a situation made possible by general development and vitalized by the Federal Reserve Banking system, can now exercise the bargaining rights of the producer. The big danger ahead is outside competition, but believed by most Southerners to be impossible. Both Japan and Great Britain are laying great plans for the production of needed cotton within their own dominions. Ultimately they must do so or allow this country to dominate not only raw cotton but the cotton goods trade. Their success in producing cotton so far has not been startling but to them is encouraging.

The time is approaching when (*Concluded on page 48*)



Our cotton fields—covering five times the area of Belgium—give work to 8,000,000 persons and yield three-fourths of the world's supply. Our exports of cotton and part cotton products are worth a half billion dollars more than all precious metals and stones mined annually. We manufacture half our crop, exporting each year more than \$125,000,000 worth of cotton yarn and cloth.



# OUR CONGRESSIONAL RECORD

THE seeming incongruity of making the world safe for democracy by autocratic methods caused the Senate a good deal of concern during the discussion of the Food Administration Bill which it passed on July 21. Another cause of uneasiness was the Advisory commission of the Council of National Defense. While the body earnestly disclaimed suspicion of the commission's individual members, its attitude was nevertheless one of lively scrutiny toward contracts.

British and American cuisine, and the price thereof under war conditions came in for attention during a discussion which brought out some interesting facts concerning the vast difference between dining on roast chicken at the Savoy in London and at the Willard in Washington.

SENATOR KNOX, OF PENNSYLVANIA. Unbounded hostile design and unbounded power leave no room in the world for free men. The peoples who

**Proportion-  
ing the  
Means to  
The end in  
Winning  
The world  
War**

stand for a civilization of freedom, of justice, and of law must stand together now or perish one by one. Should Germany triumph, the Western Hemisphere and the United States itself would be her next victim. The realization of the German purpose in Europe would have at once brought interests we are bound to defend within the scope of her imperious designs. Whatever forms of government other peoples may prefer, the American people are at war to make the world safe for this particular democracy lying between Canada and Mexico in North America. We are at war to save America, and the means employed must be proportioned to the end.

MR. SHERMAN. I wish to ask the Senator from Pennsylvania if he is in favor of extending the scope of the bill to other necessities than food? We can not fight a war by food alone. What about copper and dynamite and iron and steel?

MR. KNOX. I am in favor of extending the scope of the bill, or if not of this bill, if the necessity arises, of some other bill to include everything that it is necessary to use to win this war.

SENATOR FRANCE, OF MARYLAND. In 1899 the American farmer paid out in wages \$357,392,000; in 1909 he paid out in wages for his labor \$651,611,000, an increase in his labor cost of 82.3 per cent. In 1899 he paid out in fertilizer about \$53,500,000, while in 1909 he paid out nearly \$115,000,000, an increase of 115 per cent. Bearing in mind these facts, it is

most significant that in 1899 the cereal crop amounted to 4,438,857,013 bushels, while in 1909 the cereal crops amounted to 4,512,564,465 bushels, an increase in the number of bushels of only 1.7 per cent. That additional cost of labor and that additional cost of fertilizer, 82.3 per cent for labor and 115 per cent increase for fertilizer, brought only 1.7 per cent increase in the yield of cereals of the country. Of what a serious situation these figures tell to any man who really has at heart the interest of the American farmer and of the American Nation, for they are inseparable. I might produce more figures to show at what great cost was secured their 1.7 per cent increase of the crop of grain.

Unfortunately, we have absolutely no knowledge as to the percentage of unemployment in this country at the present time. We may have one, two, three, four, or five million men who are not working.

Now, I agree with the Senator that the assumption is a reasonable one that few ought to be out of work at such a time; but we have a very large country with a diversified population, the

**To Use the Words of the Country Editor, We "Assume No Responsibility for the Sentiments Expressed" in These Human Flashes from the Elemental Contest That Makes Our Laws. They Are Submitted Solely Because the Generally Ignored Minutes of Congress Afford a True Insight into the Work and Character of the Men—and the Woman—Who Make Up This Greatest of Democratic Assemblages.**

Many men, let me say, are idle in our cities, ordinarily, who are not guilty of any crime in not being at work. I think I am not going too far in my sympathy for human nature when I say that almost every man who is not working productively, who is a loafer, an idler, or a "bum," is so because he has not found his work. Draft those men who are not employed from the cities and let the farm boys stay on the farms.

## A HYMN OF HATE BY SENATOR STONE, OF MISSOURI

I HATE autocratic rule, I hate aristocratic rule, and fear both. I abominate kings, kaisers, czars, and emperors—royalty in any guise—and beyond these, looking downward, I can not avoid an inborn feeling—I hesitate to say a feeling of contempt, but of unspeakable dislike for all such human things as princes, dukes, lords, and others like them of minor degree who hold hereditary title under royal patent to bestride the world, as it were, that the working and really creative forces of men should pass between their outstretched legs, as between the legs of some bestriding Colossus, and lay tribute at their feet. All these lordly gentlemen, of whatever land or caste, look alike to me. I am blind to any essential difference between them. I would strip every man of them of his toggery, his haughty pretensions, and ill-gotten privileges, and send him about his business to make an honest living by his own hand and brain, and to exist like other men.

citizens of which live under very different conditions. Some are unwilling to work; some have no occupation; some want to work and can not find work. I know men of that character, and so does the Senator, I am sure, in our cities—misfits, so to speak, who can not find a suitable situation. I do not think we can afford not to know at this time what our surplus of unutilized labor is, and I do earnestly commend to the Senate a consideration again of the enrollment by occupations which I suggested some time since to find out what our man power is and how much of a surplus is available in the present emergency, because we need it all.

Let the farm boys stay on the farm and draft in their places additional unemployed men who may be now in the cities. As I said a short while since, a 2,000,000,000-bushel wheat crop might be well within our capacity. Think what another billion bushels of wheat would mean to this country. In my thinking upon economic subjects I have never been able to get very far away from the old French physiocratic school of economists who believed that all wealth comes from the soil. Certain it is that the wealth produced by the creation of a large amount of additional wheat added to the wealth of the country would tend to reduce the burden of taxation which this war will create, and reduce the percentage of liability which we are creating in piling up this huge national debt.

**Recruiting  
The army of  
Industry for  
A charge on  
The soil**

I do not believe that the spirit of this Nation is being given proper expression in this pending legislation. "The letter killeth, but the spirit giveth life."

You can not win this war by enacting drastic, despotic, un-American legislation; you can only win it by arousing the American spirit for the defense of the American ideal of democracy by and for all by invoking the deep and patriotic devotion of our people by constructive legislation conceived in an intelligent understanding of all of the difficulties which, because of war, must attend productive effort by calling every citizen to join in a spirit of conciliation and cooperation to do not his English "bit" but his American best in helping to perfect an invincible national organization.

SENATOR BANKHEAD, OF ALABAMA. There are a lot of buzzards perched on the dome of the Capitol waiting for the stark carcass of some man, woman or child over which they can hold a wake, and thank Congress for its failure to act on this measure. Congress should cry out in tones that can be heard from one end of the Republic to the other, "Attention, America; by States, right wheel, guide right, forward march!" And send a wireless message to the Kaiser that America is coming with millions of men and billions of money; with ships laden with wheat and meat, shot and shell, and every other thing necessary for the successful prosecution of the war.

If Germany can conquer and take over the fleets of England and France, combined with their own, how long would it be before their guns will be thundering at our seaports, demanding tribute in excess of her losses during the war. It makes me shiver to contemplate a situation like that.

SENATOR FRELINGHUYSEN, OF NEW JERSEY. This one thing I

know, Mr. President, every patriotic American should pitch in and help win this war and save the country. And that, as I understand it, is the aim of this bill, and for that reason I shall give it my vote.

Do not let us spend so much time picking flaws in bills. Do not let us devote our energies so greatly to criticism of this measure or that, or this official or that. Let us admit that there are faults in legislation and errors in administration, but let us press on toward the goal set before us, the winning of this war and the salvation of the world.

**SENATOR HARDWICK, OF GEORGIA.** The American people are committed to this war; yes. They will wage the war, in my judgment, with practical unanimity, as long as a

**Subtracting  
America  
From the  
Parliament  
Of man**

man can put up his hand or advance his foot, as long as there is a drop of human blood left in this country; they will wage it as long as we can spend a dollar on it. But let it be, Senators, an American war to vindicate American honor, to establish American rights—just that, and nothing more.

I would spend the last drop of blood in my body, and I would vote the last drop of blood in the body of every Georgia man and of every other American to wage such a war as that; but not one drop of my own blood, not one drop of Georgia's blood, not one drop of American blood would I vote to wage a war to "democratize the world," to determine what the boundary line of a single European country shall be, or what the form of government of any country in Europe shall be.

Now, let us get it down to that basis, and we will find the country united for this war; we will find everybody willing to wage it. Let us get away from all this other nonsense, and let our people know that we are fighting this war because Germany fired upon our flag and murdered our citizens upon the high seas, without either justification or excuse. Let us quit all this talk about European boundary lines and European forms of government, and we will get along a little faster and go a little further with this war, and conduct it and conclude it with a good deal more celerity and more success.

**SENATOR REED, OF MISSOURI.** I think if we had somebody who knew a little more about food than Mr. Hoover does, who had lived in this country in the last 15 or 20 years, we would not have

**Wherein  
Good  
Digestion  
Waits on  
Appetite and  
National  
Health on  
Both**

so much trouble about saving pie crust; we would be talking about teaching people to use corn and teaching them over in Europe to use it. For my part, I have mighty little patience with a man who wants to cut down the size of the American loaf of bread or to tell the American housewife she ought not to have flour for her babies and that she ought to eat corn meal and feed it to her family, but that the stomachs of Europe are too delicate for corn products.

**SENATOR MCCUMBER, OF NORTH DAKOTA.** Sentiment does count for a good deal. A sentiment in favor of one kind of food that a nation has been using is an important factor to deal with. When the allies were bidding against each other, sending our wheat up a dollar within a few days and to over \$3 a bushel, they were not interfering with the corn crop.

**SENATOR WILLIAMS, OF MISSISSIPPI.** The Senator [Mr. Reed] says he wants a man who has no interest save for America. I do not. We have got a number of allies in this fight, and it is a great fight. It includes nearly the whole world, and I should dislike

**Denying  
That our  
Food ad-  
ministrator  
Should play  
Step-mother  
To the allies**

to see America appoint a man to run any part of this job who had no eye and no ear save for America. I want an eye and an ear for France and for Belgium. I want a man who has been identified to some extent with poor, stricken Belgium; a man whose heart is overflowing with sympathy and mercy and benevolence, and whose deeds will overflow with beneficence for her. I do not want any mere selfish Chauvinist in this position.

If there is a position in the world that does demand widespread sympathy for all the world, and especially for our allies it is this position. I would not like the little provincial president of a State agricultural college to handle a great international question like this. In nine cases out of ten he would be incompetent for the job. I regard the utterance of the desire to have a

man who is an American, "nothing but an American," and solely American in his sympathies, as shameful.

**MR. MADDEN, OF ILLINOIS.** I happened a few days ago to be favored with the receipt of a bill of fare, the menu card of the Savoy Hotel, dated May 13. It occurred to me that it might be worth while to compare the cost of food served in the Savoy Hotel with the cost of food served in the Willard Hotel in this city, and by the way it may be stated for the information of the House that the Savoy Hotel is one of the best hotels in the world. Its standard is at least as high as the Willard, and some say much higher.

**On com-  
parative  
Cost of high  
Living to  
Innocents  
At home  
And abroad**

Now, I notice that at the Savoy Hotel, in London, they serve a table d'hôte dinner, and that table d'hôte dinner costs 6s. and 6d. That is \$1.62. You could not buy that dinner at the Willard Hotel for less than \$5.

Here is the bill of fare for the table d'hôte at the Savoy: Cream soup; supreme of sole. Supreme of sole, of course,

consists of the important meat in the fish, with all the bones taken out; nothing but the best part of the fish. Then comes chicken, after the sole, and artichoke, and bread and butter, and cheese, and coffee, all for \$1.62.

Over there soup costs 24 cents. At the Willard it costs 35. That is not very much of a difference. Over there they charge 12 cents for celery, and here they charge 50 cents. Then I find that a small steak, at the Savoy Hotel costs 36 cents. At the Willard it costs \$1.50—quite a difference. We send the meat from Chicago over to the Savoy Hotel, and we send the meat from Chicago to the Willard Hotel. The people over there pay the same price for their meat to the Chicago packers as these people pay here, surely. They ought to pay more, but they sell for less. Then they have fish.

Over there they charge 12 cents per person for coffee, and here they charge 25 cents. Roast chicken at the Savoy for four persons costs 10 shillings. That would be 60 cents per person. Then they have roast chickens over there for six persons. They charge 12 shillings for that. That reduces the price for each individual to 48 cents when six dine together. If six persons dine together over here on roast chicken, if the bill is not \$30 you will be very lucky. [Laughter.]

**MR. HOWARD, OF GEORGIA.** Is not a comparison of the prices between the Willard and the Savoy a little unfair, because about 65 per cent of what the Willard charges is for the style of the hotel?

**MR. MADDEN.** Oh, no. The Savoy is much more aristocratic than the Willard, if you gentlemen knew it.

**MR. HOWARD.** I did not know that. But I know something about the Willard.

**MR. MADDEN.** Well, they have style at the Savoy, all right. I am sorry the gentleman got stung at the Willard.

**MR. HOWARD.** I only went there once. [Laughter.]

**SENATOR BORAH, OF IDAHO.** I believe the liquor traffic of this country is near its final doom. Powerful influences may procrastinate the hour, but the hour nevertheless approaches.

**On strange  
Birds that  
Fly in the  
Dawn** It is in the hour of execution, however, that we hear singular and surprising pleas for commutation. It is then that ingenuity searches the realm of conjecture for some possible fancy upon which to hang a claim for mercy. We have an example of this here and now in this plea for the workingman,

who they say must have his beer—otherwise he will strike and break his Government down even in the face of the enemy. And following hard upon this plea to favor labor is the plea that the Government must have more revenue. You would pull \$450,000,000 out of labor, out of the scant and meager home of labor that you may be more merciful with the excess profits of war. It is not only a cold and brutal policy but it is a short-sighted and futile policy. It undermines and impoverishes and finally destroys that force with which we must ultimately win this war and maintain our supremacy as a Nation. It undermines and destroys that force which must win the war in our industrial conflict, which, as I have said, is to follow this war just so sure as one hour succeeds another. But more than that, the whole thing is unfounded and untrue. Labor will not strike for drink, labor and laboring men are not the trouble in this conflict. It is greed—the cold, conscienceless greed that stands in the way, nothing else, nothing more, nothing less.



MR. NEWLANDS. Mr. President, in my judgment, much of the confusion of mind which has existed on this subject in the Senate arises from a confusion as to the character of the advisory commission. I have always contended that the advisory commission is frankly a commission of producers and sellers,

**On fiduciary Capacities** and that the purpose of the law in providing for the advisory commission was to mobilize the various industries of the country and to organize them through their chiefs in such a way that the entire resources of the country can be readily summoned to its support in case of war.

I do not regard the members of the advisory commission as agents of the Government. They are producers and sellers who may have relations of contract with the Government, but they are brought together under an organization authorized by the Government in order that the Government's real agents, the Council of National Defense and the department chiefs, may confer with them, may gain information from them, and finally, after exhausting inquiry, make contracts with them if such contracts are desired.

MR. HAMILTON, OF MICHIGAN. We accepted the challenge in the name of humanity, and we fight under the flag of a Nation "consecrated to liberty and dedicated to the proposition that all men are created equal."

We have never fought except for liberty, and we fight for liberty now.

**On what to** This war we hope means that democracy will rule the world.

**Do with it** It means we hope that autocracy has made its last stand.

**When** And when this war is over, America will sit at the conferences of nations, where the destiny of nations will be settled for

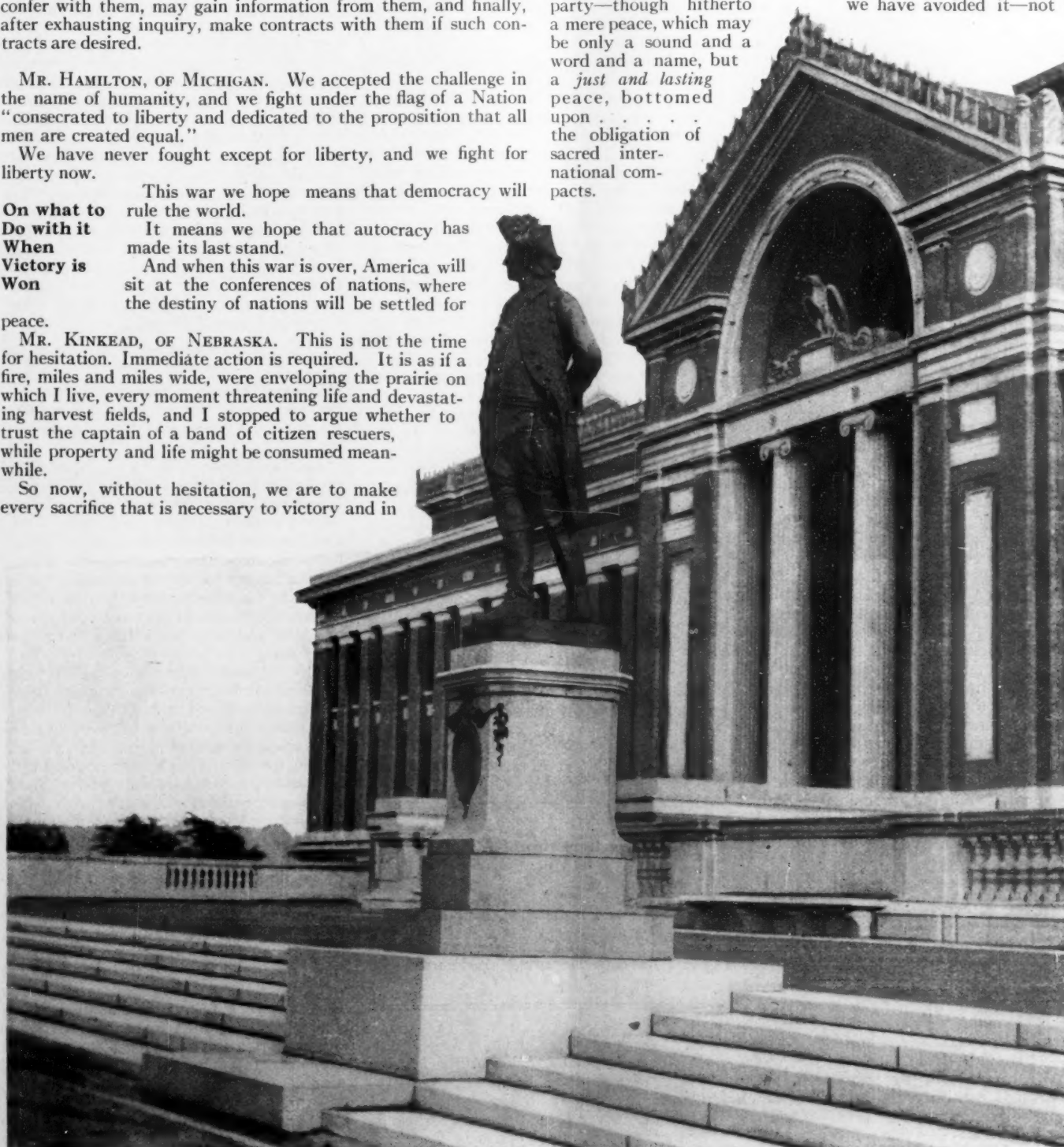
**Victory is Won** peace.

MR. KINKEAD, OF NEBRASKA. This is not the time for hesitation. Immediate action is required. It is as if a fire, miles and miles wide, were enveloping the prairie on which I live, every moment threatening life and devastating harvest fields, and I stopped to argue whether to trust the captain of a band of citizen rescuers, while property and life might be consumed meanwhile.

So now, without hesitation, we are to make every sacrifice that is necessary to victory and in

this case victory means, as it has meant in all the wars of our country, liberty. The compensation for the great sacrifices we are to make I hope may be a permanent peace established after all wronged nations have been given back their territory that belongs to them, after Belgium has been restored and has received all possible reparation, after the world has come into a realization of the ideals of democracy and the meaning of liberty which accords equal rights to all and is everlasting and all embracing, since it means that the universal brotherhood is recognized in the highest and holiest sense.

SENATOR WILLIAMS, OF MISSISSIPPI. See this thing through first; see it through not to a peace only which might be merely an armistice and a preparation by a breathing spell for or continuation of this eternal curse of national armed camps all over the world, of which Great Britain and we, the two branches of the English-speaking race, must after this war become a party—though hitherto we have avoided it—not to a mere peace, which may be only a sound and a word and a name, but a *just and lasting* peace, bottomed upon the obligation of sacred international compacts.



PHOTOGRAPHED ESPECIALLY FOR THE NATION'S BUSINESS BY C. T. CHAPMAN ©

In 1904 the Kaiser presented a statue to the American people. He overlooked Germany's poets and musicians, choosing the figure of Frederick the Great—his ancestor. Senator Bacon voiced the opposition to the gift declaring that the great Frederick represented an autocracy inimical to all American ideals. The statue was finally given a pedestal before the War College at Washington. Six weeks after the unveiling someone tried to blow it to pieces. It stands today in front of the building where officers of our army, grouped about great maps, plan the overthrow of the Prussian system which Frederick founded.

## THE NATION'S BUSINESS

A MAGAZINE FOR BUSINESS MEN



Published by the Chamber of Commerce  
of the United States of America,  
Riggs Building, Washington, D. C.



NEW YORK . . . . . Woolworth Building  
BOSTON . . . . . Tremont Building  
CHICAGO . . . . . Otis Building  
SAN FRANCISCO . . . . . Merchants Exchange Building

MERLE THORPE . . . . . Editor  
ROBERT D. HEINL . . . . . Associate Editor

Subscription Price, Two Dollars a Year,  
Twenty Cents a Copy

THE NATION'S BUSINESS is the monthly publication of the Chamber of Commerce of the United States of America and, as such, carries authoritative notices and articles in regard to the activities of the Chamber, its Board of Directors and Committees. In all other respects it is a magazine for business men and the Chamber is not responsible for the contents of the articles or for the opinions to which expression is given.

WASHINGTON, AUGUST, 1917

APLOMB is a highly desirable trait, and we are collectively showing a deal of it. As a nation we have gone into a great war with a remarkable amount of equanimity. Neither our friends nor our foes could have believed it of us. As an example of calm, keen, unanimity of purpose based upon the conscious and free choice of a large and heterogeneous population it has never been excelled.

Of course, individuals do not always come up to the national standard. At Washington, for instance, men who have left their regular occupations, and seek special employment in the occupations of war, appear rather too numerous. But after all, they are very exceptional.

The philosophers remind us that the average man is a fiction, and that he does not exist in heaven or on the earth. Nevertheless, the average man, standing to the same daily task he knew in peace times, is a very real person and bears the brunt of war's support. He meets all the problems of supplies of materials, adequate and efficient labor, new equipment that has to be obtained in markets that are swept clean, shipments of products over routes that bristle with embargoes.

This is the man whose resources of initiation, energy, and grinding effort are the surest guarantee of victory in the great enterprise to which we have set our hand. He may be farmer, blacksmith, railroad president, foundry foreman, clerk, or merchant, but without him no amount of human sacrifice in trenches will avail.



BEANS AND PEAS have come up in the world, until they occupy a prominent seat among the mighty foodstuffs of creation.

Their importance became acknowledged after the European war had got well started. Then they began to converge upon Europe from all sorts of places. In Brazil beans had been a humble article of daily use, and certainly cut no figure in the export trade. But Brazilian beans were discovered by the outside world, which went to bidding up their price by 600 per cent, and carrying them across the Atlantic. Arrived in England, Brazilian beans met other beans from China, Burmah, Madagascar, and elsewhere.

The high prices—\$350 a ton was being offered for Japanese peas in June,—at-

tracted the attention of the British Food Controller, who issued an edict which, whatever the effect from the point of view of British importers, very probably may reduce the cost of living for many an Indian along the Amazon.



THE TWO CANALS which afford short cuts around continents have in different ways felt the results of war.

The Suez Canal has not only been a naval and military highway of great importance but in the early part of the war was an object of attack by hostile forces. In fact, for a year it was on a "front" and continues to be in a war zone, although the land fighting has passed onward into Palestine.

The report of the results of the Canal became public in June, when the Company held its sixty-third annual meeting at Paris. Nowadays, even mercantile traffic through the Suez is largely carried by vessels operated by government,—a fact which appears in the circumstance that although the tonnage of all vessels using the waterway last year was over 38 per cent less than in 1913, the tonnage under private operation was 56 per cent less.

In the financial results to the canal company the decreased use is partly compensated by increased charges for toll. These charges are 36 per cent over those of pre-war days. As a result dividends are still being earned. Moreover, the company looks forward with great expectations to the traffic when the war ends.

The Panama Canal has been far from any zone of military operations. It has been a center for activities for protection of its facilities and for guarantee that no hostile act occurs within its boundaries. In the twelve months that ended with June, 1917, it collected tolls aggregating \$5,872,000 as against \$2,554,000 in the earlier year. The Panama Canal, too, can look forward with expectation to the traffic of post-bellum days.



FOREIGN BANKING must be something of a habit into which we grow gradually. At any rate, it is a kind of enterprise upon which we should embark only after mature deliberation.

Perhaps it is not so much a question of

**Heroism: Sometimes It is to Stick  
to One's Job**

**The Bean a Patrician Is  
Suez and Panama in War-time  
Foreign Banking a Habit  
Foreign Exchange up Front**

habit with us as of deliberation. Individuals have been free under the laws of several of the states to organize corporations to do a banking business abroad, and there are several of these corporations.

Since 1913 national banks of large size have had authority to open branches abroad, and some branches are in operation. Last September they received permission also to cooperate among themselves, through owning stock in a corporation

specially organized to carry on the banking business in foreign countries.

As things stand, this special corporation must be organized under state laws. The Federal Reserve Board has again recommended to Congress, however, that a statute be passed for such enterprises as federal corporations.

Under the law of last September one cooperative foreign banking association appears to be in prospect. According to announcements made in July it will be ready for business on September 1 and its stock will be held by national banks in New York, Boston, Philadelphia, New Orleans, St. Louis, Chicago, Minneapolis, Cincinnati, Milwaukee, and San Francisco.

Even countries which since the beginning have been in the European war are expanding their foreign banking more rapidly than we. Canadians have recently opened new branches in the northern part of South America, a France institution has found opportunity to open a new house in Hongkong, largely to take care of settlements for the trade of Indo-China with Europe and the United States. The Japanese, too, are active in extending their financial facilities.

Like England, however, those countries have, in several degrees, the habit of foreign banking. Like other habits, this one may involve an element of "acquired taste" and a good deal of the dexterity which comes with long practice.



FOREIGN EXCHANGE has recently reached the front page of the newspapers, after remaining for years in small type far toward the back.

Increased attention to the quotations of American dollars in neutral European countries apparently arose pretty largely out of a sudden public consciousness that the rates of foreign exchange really concern us. About the rates themselves there was nothing so very striking or new. Ever since the European war began, and even before, American dollars have been quoted at a discount in such countries as Holland and Spain.

The reasons may be complex. One element has been the situation of the exchange market in London, through which we still do much of our financial business with the continent of Europe and the rest of the world, although we are constantly increasing our direct transactions. London has been the center of finance for the allied countries. It has had the stupendous task of keeping exchange in the rest of the world as near par as possible; for adverse exchange proportionately increases the cost of purchases made abroad.

Since the efforts to sustain exchange depend upon conditions which vary with each country, the results are correspondingly diverse. They are illustrated by the quotations of English money for the end of the first week in July. The discount at which English funds were then offered in different parts of the world were, 4% in Holland, 11% in Switzerland, 10% in Denmark, 19% in Spain, 5% in Argentina, 7% in Norway, and 3% in New York.

In some other countries, which had large payments to make in England, the rates were at a premium. For example, English funds in Italy commanded a premium of 36%, in Portugal 40%, in France 9%, in Brazil 14%, and in Chile 29%.

Such rates as these suggest the tasks of



international bankers, who in effect try to keep books with all the world, setting the rates of one country against another and out of the maze of permutations and combinations endeavoring to get the rate which is most advantageous. In this way, they get pesetas for the man who has to pay for purchases in Spain, lire for the man who has to settle in Italy for lemons or glass beads, and rupees to pay for jute and other things we buy in India.

After all, when the machinery of international exchange is stripped away it remains very much the same as in the days when money changers plied their trade in the market places. A dealer in international exchange no longer has to be an expert in the coinage of the world, and he does not have to keep at hand a pair of scales to weigh the pieces offered to him; but he differs from his predecessor merely by dealing in credits instead of coins.

Occasionally he has to revert, however. For instance, he has had so much difficulty in providing credits which can be used in India to purchase jute that he has had his customers load silver on board ship, as in the good old days when American ships sailed to gather the fabrics and spices of the East Indies, and carry it to India. Even that expedient did not prove entirely successful, but it illustrated the situations which war has introduced into the intercourse of nations.



HAY was to become obsolete before the onslaught of the internal combustion engine, and its fragrance was to live only in poetry and in perfumes made from the products of coal tar.

But hay is still with us. Last year it turned out a crop which beat the record and had a value in excess of a billion dollars. At centers where, before the automobile appeared, there was no exchange on which hay was bought and sold there are now organized markets and a trade paper is authority for the statement that whereas memberships in one long-established hay exchange went begging at twenty-five dollars fifteen years ago, they are now in demand at fifteen hundred.

Of course, automobiles do not eat hay, at least not habitually. The fact is that automobiles are only one product of a silent revolution. Another product is transition to a stage where we increase the cattle we feed for the dairy and for meat. We have really been adding to our resources in cattle, not so much in numbers as in the quality per head, and hay has proportionately increased its importance in the scheme of things.



OUR RESOURCES of all kinds eventually boil down pretty closely to our bank accounts. Our wealth may be \$250,000,000,000, but our banking power, our ability to meet forthwith the needs of the government and of industry and commerce, governs our real position.

In June control of our banking power passed in greater degree than ever before to the Federal Reserve Board, through the new law which causes the banks in the reserve system to increase the reserves they have with reserve banks and to become increasingly close to the reserve banks in their ordinary operations.

In view of these changes, a member of the Reserve Board has made some state-

ments. He finds that the reserve banks can add three hundred per cent to their half billion of outstanding reserve notes. This additional \$1,500,000,000 he estimated as equivalent to \$7,500,000,000 in available credit upon which the country has not yet drawn. This reserve credit is only one billion dollars less than the combined loans and discounts of all the national banks on May 1. Such figures suggest the power which the Reserve Board holds as the basis of its functions as our board of war finance.

War conditions have caused the federal reserve system to develop quickly the uses to which in ordinary times it would have

**Hay Declines to Abdicate  
A Squint at Our Resources  
Controllers the Thing in England  
Cost Plus Not a Stranger  
Business Books Getting Thumbed**

gradually attained. As fiscal agents for the government, reserve banks have assisted in providing funds on treasury certificates and they handled the Liberty Loan, for which \$1,500,000,000 has now been actually paid by subscribers. When heavy payments of taxes had to be met in June, they had their facilities ready to assist the banks, through which, in one way or another, our taxes pass on their way to the federal treasury. The task of the Federal Reserve Board is to see that all these country-wide fiscal operations proceed smoothly and without let or hindrance to ordinary transactions, and at the same time that credits are not created so bountifully as to speed inflation.

A preventive for inflation is savings. England estimates the annual savings of its people before 1914 around \$2,000,000,000. Optimistic persons placed ours as high as \$5,000,000,000. If we could now double our annual savings, we might make them ascend toward the current cost to us of war. What we are to achieve in this direction is one of the interesting disclosures the next twelve months will bring for us.



CONTROLLERS and committees are quite the order of the day in England. A recent issue of the weekly British Board of Trade Journal has news about the Controller of

Coal Mines setting prices, the Minister of Munitions so restricting manufacture of shotgun ammunition that only farmers who have to kill vermin may have any, the Controller of Timber Supplies cautioning indiscreet local authorities from using wood blocks for new paving, the Food Controller and his authority to requisition anything within his purview and pay a price based on cost plus a pre-war profit, a board to control the sale, price, and use of cotton, the Petrol Commissioner who apportions the nation's supply of gasoline, the Dye Commissioner, and the Committee on Electric Power.



"TIME AND LIME" are conditions of contract with which Englishmen were familiar in pre-war days, as the Admiralty customarily used these ancient terms of cost plus a per cent for profit when it let contracts for repair of its vessels.

Earlier in the war, "time-and-lime" conditions were used by the British government in letting contracts for new vessels. Difficulties developed, however, and the conditions were changed in such a way that for each contract a maximum was set for the cost, and 10 per cent was then allowed for profit, as formerly. This is apparently the present basis of contracts made by the British government for vessels.



BUSINESS BOOKS are making a stir in the bookseller's world. The fact is that business has become a thing to write about, and if the European war in the end proves to have been a period of industrial revolution they may shortly complete the overthrow of the novel.

Perhaps the publisher and the bookseller contemplate the rise of business books with some satisfaction. For a time, not so many years ago, the book trade saw visions of a constantly increasing horde of ephemeral volumes. History, science, and economics have more recently been winning their way back, and now they are receiving the support of a new and powerful ally.

One publishing company reports that nine of its business books have sold to the extent of at least 70,000 copies each. A New York bank finds use for a library of 20,000 volumes and 400,000 pamphlets. The number of business offices and plants that have working libraries as a part of their equipment increases every day. All this does not mean that business men are becoming "bookish," either.

## Congress and the Business of War

### July was Given Over to Providing Billions in Money, Administering the Nation's Food, and Trading with the Enemy

ON June 15th a bill carrying great sums for war became law. It apportioned three billion, three hundred million dollars, mostly to the War Department. On July 25th the War Department asked for five billion, nine hundred million more.

This new request is based upon an expectation that before June 30th, 1918, the United States army will include 86,000 officers and 2,033,000 men. In such a military establishment 290,000 men will belong to the Regular Army, and 625,000 will be in the National Guard.

The biggest single item in the Army's latest estimate of its needs is \$2,468,000,000 for heavy artillery and its ammunition,—a purpose for which \$762,000,000 is already available this year.

What the total expenditures of the federal government will be in the twelve months from July 1, 1917, —for all purposes, both those that are ordinary and those that are connected with war,—cannot yet be foretold with accuracy, since Congress will undoubtedly

**This year's Budget**

add further appropriations next winter to the amounts it makes available this summer. According to a rough estimate, however, the total will considerably exceed \$14,000,000,000.

The important items in this total are: Appropriations for this year made last winter.....\$1,900,000,000 Loans to friendly European countries, authorized on April 24.....3,000,000,000 Appropriations made June 15. 3,300,000,000 Appropriations for aviation, July 24.....640,000,000 Army estimates of July 25....5,900,000,000

Some of the money provided by these appropriations was expended before July 1, and cannot strictly be included in the account for the present fiscal year. Thus, \$875,000,000 was lent to foreign governments before the end of June, and some of the money provided for the army and navy was at once spent.

These sums will, however, be offset, and more, by additional requirements which are still to be announced, such as further billions for loans to other governments. The rate at which these loans are being made probably cannot be very greatly reduced, and to July 24,—i. e., in the first three months after loans were authorized,—the rate had been an average of \$439,000,000 a month, or approximately \$5,000,000,000 a year. If our loans in the year that is to end next June really keep to this rate, further appropriations for this purpose alone will have to approximate \$3,000,000,000. If war continues during the next eleven months, the federal government will probably find on June 30, 1918, that in twelve months it has spent about fifteen billion dollars.

In September of last year and again in March new taxes were levied to augment the government's revenues. The earlier of these two revenue laws followed estimates which the Secretary of the Treasury submitted to Congress on August 17, 1916. The taxes then in existence, and the receipts of the postal service, were expected to produce about \$1,100,000,000 a year. Each of the two subsequent revenue laws would yield about \$200,000,000,—the former by increases in the income tax, by a tax on estates, by taxes on munitions manufacturers, and by taxes on capital stock, beer and the like, the latter by taxes on excess profits and by increases in the tax on estates. Accordingly, when war began, existing taxes and postal receipts would yield about \$1,500,000,000 a year.

The declaration of war in effect was a public declaration that the revenues had to be increased. On April 15 **The Revenues** the Secretary of the Treasury recommended a whole series of new taxes. The House Committee on Ways and Means accordingly reported on May 9 a bill which levied enough new taxes to raise \$1,800,000,000. On May 23 this bill passed the House. On July 3, the Senate Committee on Finance reported it with amendments which would reduce its yield to \$1,670,000,000. Within a week, however, the Senate Committee recalled its report, because of increases in expenditures which were becoming likely, and now it is considering how it can increase the yield in view of the Army's estimates of July 25.

The Senate Committee's recommendations of July 3 were estimated to produce

additional revenues from new taxes somewhat as follows:

On Incomes.....	\$532,000,000
Excess Profits.....	523,000,000
Tobacco, Liquors, Soft Drinks.....	223,000,000
Freight Transportation.....	37,500,000
Express and Parcel Post.....	17,500,000
Pullman Berths and Seats.....	2,250,000
Petroleum Pipe Lines.....	4,500,000
Telephones and Telegraphs.....	7,000,000
Publications.....	7,500,000
Automobiles.....	40,000,000
Sporting Goods.....	800,000
Pleasure Boats.....	500,000
First Class Mail.....	50,000,000
Second Class Mail.....	3,000,000
Tea, Coffee, Sugar, Cocoa.....	86,000,000
Admissions.....	23,000,000
Schedule A, Stamp Taxes.....	30,000,000
Cameras.....	500,000
Perfumes, Cosmetics, and Proprietary Medicines.....	5,100,000
Virgin Island Products.....	20,000

Under Congressional procedure, the bill will eventually attain two rather different forms,—the bill the House passes and the bill the Senate Committee's passes,—and by a **Changes** process of adjustment the differences will be eliminated in a conference between representatives of the two Houses.

The House form was reached on May 23, and some of the House leaders, pointing to the provision of the Constitution which says that all bills for raising revenue are to originate in the House, incline to criticize any extensive alterations by the Senate. At times, when the House has conceived that amendments made by the Senate invaded its prerogative, it has returned bills to the Senate without taking any action on them.

The Senate form of the bill will not be known, and the differences actually shown, until the bill has passed the Senate. Meanwhile, the Senate Committee on Finance has proceeded in such a way as to make rather clear the position the Senate will take. The Senate Committee began by eliminating retroactive taxes, of which the House adopted two,—one equal to one-third the income tax paid for 1916, this new tax to be due on September 15, 1917, and the other a tax on excess profits in that part of 1916 included in the fiscal year of a corporation or partnership which does not keep its accounts by calendar years.

The Senate Committee went further and made amendments in the present law upon which taxation on income is based. For collection at the source, in the case of taxpayers who are in the United States, it substituted information at the source.

Instead of the basis adopted in March for ascertaining taxable excess profits, and known as the American plan,—taxation of net earnings in excess of \$5,000 plus 8 per cent of the capital invested,—it used a modification of the British plan,—taxation of current profits in excess of the average rate earned in 1911-1913, with provision that in exceptional cases the pre-war rate might be assumed to be either six per cent or the rate earned by representative enterprises engaged in the same kind of business. Thus, the taxable excess profits would be determined by the pre-war earnings and not directly by capital, which the Committee may have found it difficult, as a matter of administration, to ascertain.

The Senate Committee then turned to

the rates. The additional super-taxes on individual incomes exceeding \$40,000 were reduced until existing taxes and new taxes combined amount to 50 per cent upon income over \$1,500,000; according to the House bill the combined rates at this point were 60 per cent and rose by two further steps to a maximum of 62 per cent on the excess above \$2,000,000.

The existing taxes on individual income, existing taxes combined with the House rates, and existing taxes combined with the rate the Senate Committee proposed on July 3, are shown in the following table:

Income	Existing Taxes			House Senate	
	Taxes			Taxes	Com- mittee
\$2,000—	\$4,000.....	—	2%	2%	2%
4,000—	5,000.....	2	4	4	4
5,000—	7,000.....	2	5	5	5
7,500—	10,000.....	2	6	6	6
10,000—	12,500.....	2	7	7	7
12,500—	15,000.....	2	8	8	8
15,000—	20,000.....	2	9	9	9
20,000—	40,000.....	3	11	11	11
40,000—	60,000.....	4	16	14	14
60,000—	80,000.....	5	20.75	18	18
80,000—	100,000.....	6	25.50	22	22
100,000—	150,000.....	7	30.25	25	25
150,000—	200,000.....	8	35	30	30
200,000—	250,000.....	9	41	35	35
250,000—	300,000.....	10	45.75	39	39
300,000—	500,000.....	11	50.50	43	43
500,000—	1,000,000.....	12	60	48	48
1,000,000—	2,000,000.....	14	16	49	49
2,000,000—	.....	15	62	50	50

In addition to the tax of 4 per cent upon the net income of corporations, the Senate Committee proposed a new tax, to be 15 per cent of current net earnings which are held in the business and not so distributed as to be reached by the super-taxes upon individuals' income. Before this tax is imposed, however, there are some exemptions. The amount carried to reserves in accordance with requirements of law would not be taxed; this provision applies especially to banks and insurance companies. Railroads would not be taxed upon amounts used, with express approval of a regulatory commission, for extensions, renewals, or betterments. Producing and distributing corporations would be exempt upon 20 per cent of their current net earnings, and so could keep this proportion in the business without paying the special tax.

This proposal has come in for much discussion. In fact, the Senate Committee has decided to make some changes. It began by undertaking to make two concessions,—by allowing exemption of any amount held to pay federal taxes, and by permitting public utilities and insurance companies to have advantage of the exemption of 20%. Subsequently, the Committee concluded to make further modifications, the exact nature of which is not yet determined. The probabilities are it will exempt from the tax earnings which are really put into a business and not clearly kept for the purpose of avoiding heavy supertaxes on personal incomes.

The Senate Committee has not only changed the basis for the tax or excess profits but has made the tax applicable to the profits of individuals from business and trade and has adopted a scale of rates in place of the flat rate proposed by the House of

**Excess  
Profits  
Taxes**



Representatives. Moreover, it has made its graduated rates apply, not according to capital,—the suggestion made by the Secretary of the Treasury on April 15,—but with respect to the amount exempted from the tax.

The Secretary of the Treasury suggested a scale of rates which would rise from 10 per cent on profits between 8 per cent and 15 per cent of the capital to 25 per cent on the amount in excess of 50 per cent, estimating his plan would produce \$425,000,000 a year. The House thought its rate of 8 per cent, additional to the present tax of 8 per cent, on profits exceeding \$5,000 plus 8 per cent of the capital invested, would make the total taxes collected from this source amount to \$400,000,000. The Senate Committee uses rates ranging from 12 per cent to 50 per cent according to the percentage by which current profits exceed the rate of profit in the pre-war period it selected, and thinks these rates will realize about \$523,000,000.

Comparative results of these various plans are roughly apparent from calculations for a corporation which has capital of \$100,000, pre-war profits of \$8,000 and current profits of \$15,000. According to the original suggestion of the Secretary of the Treasury, such a corporation would pay a tax of \$200; under the House bill it would pay \$320; and according to the Senate Committee it would pay \$1,472. If the pre-war profits were \$15,000 and current profits \$50,000, the taxes would be respectively, by the different plans, \$2,550, \$3,520, and \$10,935.

According to published statements of the earnings of large corporations, a manufacturing company with total capital in the vicinity of \$100,000,000, pre-war net earnings of 8.5 per cent, and current net earnings of \$18,000,000, would pay, under the three plans, respectively, \$1,150,000, \$1,600,000, and \$2,492,000. Another large and successful company, engaged in mining had net earnings approximating 27 per cent in the pre-war period, and this year may have earnings of \$28,000,000 on a capital of \$67,000,000. Its tax for excess profits would be \$2,665,000, \$3,621,000, or \$1,766,000, according to the plan used.

These examples, of course, are taken at haphazard. They probably illustrate nothing except the diversity of results which depend upon the principle that is used. The principle may be to levy a tax upon large incomes, as such, or it may be to lay a tax only upon the amount by which earnings now exceed the rate of earnings in the days before the European war brought into existence new and extraordinary conditions.

The House bill laid a heavy tax upon express shipments; the Senate Committee has attempted to equalize

**Other Changes** this tax by lowering it and placing a small tax on competing parcel post. The tax on insurance policies the Senate Committee dropped, as likewise the tax on jewelry and musical instruments, but it added a tax on checks for amounts in excess of \$5. The tax on automobiles it shifted from manufacturers to owners, at the same time putting a tax on manufacturers of cameras. The customs duty of 10 per cent ad valorem on imports it discarded, but it placed "war excise taxes" on sugar, coffee, tea and cocoa. Altogether,

the provisions of the bill illustrate the intricacies of direct taxation for federal purposes.

The Senate Committee, after receiving back its bill on July 7, awaited events.

**Further Changes** It had no meeting until the week of July 23. By the end of that week it was ready to consider ways in which the taxes it had suggested on July 3 could be increased. What the increases will be, and on what they will fall, cannot yet be accurately forecast. It is probable, however, that they will be sufficient to raise the returns from the bill to \$2,000,000,000, at least, and that they will be enlargements of the rates on incomes, both individual and corporate, with additions to the proposed taxes on some articles of personal consumption. The greater part of the increases will probably come in the income taxes. It is not unlikely that the income tax, which yielded \$70,000,000 in the first complete year of its operation, will now be expected to raise a billion dollars.

Debate can scarcely begin in Senate before the second week in August. The new bill will hardly become law before September. The federal government may then have legislation which, all-told, will raise about three and a half billion dollars from taxes. In the year that closed on June 30, direct taxes brought in a little less than \$900,000,000, and customs duties \$225,000,000 more, or a total around \$1,125,000,000.

As yet there has been no announcement of policy with respect to the whole extent of the government's needs this year that will be met from the proceeds of bonds.

**Bond Issues** That there will be authorization of issues beyond the \$5,000,000,000 of which \$2,000,000,000 have been sold in the Liberty Loan seems certain. Probably further issues of Treasury certificates will be made possible, too, since taxes on incomes and the like will not produce the greater part of their yield until after January 1.

That Congressional prerogatives give way on occasion appeared in the middle of July. Although the House

**The American Air Service** of Representatives usually insists upon itemized appropriations, it disregarded settled habits and after four

hours of general debate, in which none of the details of the American program for a great air service were disclosed, passed a bill which at the end of twelve pages of outline appropriated \$640,000,000 in a lump sum. That lump sum appropriated in less than thirty words is half again as large as the entire cost of building the Panama Canal, and it is to be increased later by more appropriations for the same purpose.

Following the example of the House, the Senate passed the bill with even less debate and more secrecy about details, and without altering a word. In neither House was there a dissenting vote. On July 12 the Secretary of War had placed before the House Committee on Military Affairs the confidential details of a great enterprise. On July 24 the President had approved the acquiescence of Congress, and military secrets were as safe as they had been two weeks before.

All legislation has not proceeded with the expedition of the bill with its large appro-

## Control of Food and Materials

priation for the Aviation Section of the Signal Corps. On June 2 the Senate passed a bill which contemplates a survey of the food supply of the country. On June 29 the House passed the bill which authorizes preference in transportation for food and articles of essential importance. Each measure had earlier passed the other House. Nevertheless, they have not yet been placed in final form for enactment by having their differences adjusted.

The final form of these bills will depend somewhat upon the measure which deals most fundamentally with control of food supplies and fuel. This bill passed the House on June 23. Debate, which on June 18 had already begun in the Senate, almost wholly engrossed the Senate's attention for weeks, ending on July 21. Conference between the two Houses at once went into secret session in an attempt to arrive at a measure upon which both House and Senate could agree. They are not likely to report their compromises much before August 2 or 3.

Delay to the bill may be one of the causes which have brought into prospect a special session of the legislature of the State of New York, to provide an independent food administration for the state.

The first difference between the House and Senate turns upon the form of the authority through which the provisions of the bill will be administered. The House bill will allow the President to appoint the food administrator whom he selected early in May and who has since been active; the Senate voted to require the President to appoint a board of three persons, subject to approval of the Senate.

**Food Administration** The House said "foods, feeds, and fuel, including kerosene and gasoline," and added some provisions which extend to other articles, including farm implements and fertilizers. At one stage in the debate, however, the Senate contemplated a more extensive list, upon which would have appeared steel and cotton.

The House dealt with foods, feeds, fuel, and articles required for their production.

**Articles Affected** The Senate said "foods, feeds, and fuel, including kerosene and gasoline," and added some provisions which extend to other articles, including farm implements and fertilizers. At one stage in the debate, however, the Senate contemplated a more extensive list, upon which would have appeared steel and cotton.

The food administration will exercise its control primarily through the device of permitting only persons to whom it gives licenses to handle articles which the bill names. Licenses will

**System of Licensing** be subject to restriction of profits, elimination of any detrimental practices, and generally to such supervision as to prevent waste and undue prices. The plan of requiring operation under licenses can be imposed upon wheat elevators; cold storage for meat, poultry, eggs, and dairy products; packing houses; manufacturers of farm implements and machinery; coal mines and coal dealers; fertilizer manufacturers and dealers; and any person who handles the articles indicated in this paragraph and who is not a retailer. In addition to retailers, farmers and cooperative associations of farmers are excepted.

In the same connection, grain exchanges will be subject to regulation, at least as to dealings in futures.

Control of the channels of trade, how-

## Sound Principle

Any organization, institution or enterprise not founded upon a sound principle cannot long exist.

The Premium Industry is founded upon probably one of the oldest business customs in existence—that cash trade is entitled to an extra reward. Whether practiced by the merchant in the metropolis or “the general store at the cross-roads” the principle remains the same.

The Nationally popular **2X** Green Stamps enable the retailer to give cash paying customers a substantial discount, which in turn obtains for them merchandise of lasting worth (**2X** Premiums) for the home.

Millions of frugal housewives trade with thousands of progressive merchants who show the sign: “We give **2X** Green Stamps,” and pay cash. Such a method of trading is most beneficial for dealer and customer.

Today, these discount for cash tokens stand supreme as a direct aid to practical thrift in American homes. Because—the principle is sound.

**The Sperry & Hutchinson Co.**

Geo. B. Caldwell, Pres.

2 West 45th St.

New York City

ever is not the only procedure that is contemplated in the bill.

**Requisition** There are powers of requisition. They may be used, not only for the support of the armed forces, but also for “every other public use connected with the common defense,” and they extend to other necessary supplies in addition to foods, feeds, and fuels.

If other methods of control prove inadequate, the government may requisition factories, packing houses, or mines, and proceed to operate them.

The Senate bill in several of its parts allows the government to fix prices.

**Fixing Prices** Reasonable prices to producers, as a means of stimulating production, is one of the purposes. In

the case of wheat this price for the best grade could not for next year be less than \$2 a bushel at the principal interior primary markets. In order to assure reasonable prices for producers of fuel, flour, meal, beans, and potatoes the government could become a general purchaser of such articles, using as its original capital the appropriation of \$150,000,000 which the bill carries. This capital it could turn as fast as it could sell onward to consumers.

Reasonable prices to consumers is another purpose, to be achieved probably, not by low prices to producers whose activities may have to be stimulated by good prices, but by reducing intermediate profits to a minimum.

Coal comes in for special attention in the bill. Four methods of dealing with prices of coal are provided. In

**Coal** the first place, operators of mines and dealers may be placed under licenses and compelled to observe profits, etc., which the President considers reasonable. If the President chooses, either in connection with licenses or without them, he can require all mines in a district or in the country to sell through a common selling agency designated by him and empowered to determine the prices it will use in selling to users of coal. He can also authorize the Federal Trade Commission to fix prices of coal, and require that these prices be observed, under penalties of fine and imprisonment. Finally, if the President finds that the prices that are fixed are not observed by a mine or a dealer, he may requisition the plant and facilities of the recalcitrant, operate them, and sell at prices which are uniform for different qualities.

The use of food materials for the manufacture of intoxicants caused much discussion in the Senate, which

**Intoxicating Liquors** took several different positions before it arrived at a conclusion. The House

flatly forbade the use of food materials for alcoholic beverages, allowing the President to use his discretion about requisitioning spirits in bond for redistillation. Meanwhile, the Senate Committee on Finance suggested insertion in the revenue bill of a prohibition tax upon materials used for making distilled spirits,—\$60 a bushel on grains; \$5 a gallon on molasses and the like.

Accordingly, in dealing with the food bill, the Senate forbade the use of food materials for distilled spirits, thus leaving beer and wine outside the control that is contemplated. It then required the President to take over all distilled spirits in bond at such a price as he might determine, with appeal to the courts for owners

who are dissatisfied. The final conclusion may be that materials may not be used for distilled spirits intended for beverages, the President will have power to control the amount of materials used in making beer and wine, but there will be no general requisitioning of spirits in bond.

Before passing the bill the Senate added two riders. The first would create a joint Congressional committee,—

**Expenditures In Conduct Of War** three Democratic Senators and two Republican and three Democratic Representatives and two Repub-

lican,—to keep advised about all expenditures for war and all contracts and to make reports to Congress. This rider may be eliminated and the subject considered separately.

The second rider would effect the committees of the Council of National Defense. It would prevent a member of any advisory committee from making recommendations concerning contracts which the government might make with any concern in which he has an interest, as stockholder or otherwise, and would require him to make disclosure of all such interests.

On July 11 the House passed the bill which imposes penalties for trading with persons who are in a hostile country, and contains provisions that may affect commercial transactions everywhere. The bill has since been before the Senate Committee on Commerce, which has had some hearings, but as yet has made no report.

The House acted upon a bill which differed in some details from the measure first introduced in May, as well as from several intermediate bills, and adopted amendments which will in some directions decrease the hardships that are possible. For example, it made it unlawful for a person in the United States to have transactions with a person in a neutral country who transacts business in a hostile country only if the dealings from the United States have a connection with the business done in Germany. As the bill originally stood, the President might by proclamation forbid commercial transactions with natives of Germany residing in any part of the world, even though they had become citizens of a neutral country or of the United States; this possibility the House limited to persons still citizens or subjects of Germany.

The House also introduced means by which any loyal citizen of the United States now in Germany may, upon leaving Germany, obtain from the alien property custodian any of his property that has been taken under control, provisions for persons in the United States taking property by will or inheritance to get it from the custodian, and protection for the interests of American insurance companies that may have re-insured with German companies. The House decided also that if persons in Germany are sued in our courts they may appear by counsel.

### An Invitation—And a Challenge

An invitation and a challenge have been sent by the National Association of Commercial Organization Secretaries to every commercial secretary whether a member of the Association or not. The invitation is to attend the Association's third annual meeting,—which will be the twelfth annual gathering of commercial organization secretaries,—



at Congress Hotel, Chicago, September 24 and 26.

First is set out the program, then this challenge: "Will any secretary have the nerve to say that he is not interested or would not be benefited by such a program? If there is such a man in the profession, let's see who he is, what kind of an organization he has, and what it has done."

Here is the program which justifies the challenge:

"Membership Development and Maintenance."

"The Proper Place of Industrial Development in the Work of the Commercial Organization."

"The Small Town Commercial Organization, What Can It Do?"

"Organization Service for the Retailer."

"Transportation Problems, How Shall They Be Dealt With?"

"Trade Extension Trips—Methods and Results."

"Self-Education of the Secretary."

"Stimulating the Organization Machinery."

"The Secretary's Relation with the Department of Commerce."

There will be group meetings, or roundtables, at which the following subjects will be discussed: "Membership Campaigns," "Factors in Securing Factories," "Relations with the Railroads," "How to Serve the Retail Merchant," "Securing and Entertaining Conventions," "Budgets and Organization Expenditure," "Agricultural and Commercial Cooperation," "How Far Does the Modern Commercial Organization Represent the People of the Community?"

The program represents the composite view of the full membership, who were canvassed by a questionnaire immediately following last year's convention. This questionnaire was conducted by a program committee, experts in program building. Every paper and every discussion will be pregnant with suggestions for the best secretarial methods in chamber of commerce work.

### Contraband of War

SINCE Mr Madison, as Secretary of State, declared in 1806 that only naval stores could properly be considered contraband of war so many events have happened that our fourth President would be quite aghast before the contraband list to which we have now attained.

Contraband gets its character from its use for the conduct of war. The real change has occurred in the articles which are used for the waging of war. A century ago war was a simple affair in its material side. To-day, when nations pit all their resources against one another, these articles have multiplied.

Coming events were foreshadowed in 1907 when an international conference at the Hague failed to reach an agreement about the articles which might be declared to be contraband. The subsequent naval conference which resulted in the Declaration of London, in 1909, succeeded in arriving at lists of articles which might be declared contraband,—either absolutely, when en route to a belligerent country, or conditionally,—the condition being that they are destined actually for armed forces.

In spite of the efforts of the United States, in the early part of the present war, to have these lists observed, the Declaration of London for practical purposes is now obsolete. The United States has not issued a list of articles it will consider contraband and subject to confiscation when destined to a hostile country, perhaps because it has yet had no need to intervene directly between neutrals and the enemy, having found a substitute weapon in an

embargo upon certain exports; but European belligerents early proclaimed lists of contraband, and have industriously expanded them. On July 2d England announced the following list, which until now, so far as we know, no journal has had the courage to print:

#### ABSOLUTE CONTRABAND

ABRASIVE materials (see emery), acetic acid and acetates, acetic anhydride, acetic ether, acetones and raw or finished materials usable for their preparation, aircraft of all kinds together with accessories and articles suitable for use in connection with aircraft, albumen, alcohols including fusel oil and wood spirit and their derivatives and preparations.

Aluminum and its alloys, alumina and salts of alumina, ammonia ammonia liquor, ammonian salts, aniline and its derivatives, animals, saddle, draught and pack, antimony and the sulphides and oxides of antimony, apparatus which can be used for the storage or projecting of compressed or liquefied gases, flame, acids or other destructive agents capable of use in warlike operations and their component parts.

Armor plates, arms of all kinds, including arms for sporting purposes and their component parts, arsenic and its compounds, arsenical ore, asbestos, asphalt.

BALATA, bamboo, barbed wire and the implements for fixing and cutting the same, barium chlorate and perchlorate, barium sulphate (barytes), bauxite, benzene, benzol and its mixtures and derivatives, biyumen bleaching powder, bone black, bones in any form whole or crushed, bone ash, borax, boric acid and other boron compounds, bromine.

CADMIUM alloys and cadmium ore, calcium acetate-nitrate and carbide, calcium sulphate, camp equipement articles of and their component parts, camphor, capsicum, carbolic acid, carbon disulphide, carbon, halogen compounds of, carborundum, carbonyl chloride, cartridges, caustic potash, caustic soda.

Celluloid, cerium and its alloys and compounds, Charges, cheques, chloride of lime, chlorides metallic (except chloride of sodium) and metalloids, chlorine, chromium, and its alloys, salts, compounds and ores, Clothing and equipment of a distinctively military character, cobalt and its alloys, salts, compounds and ores, copper pyrites and other copper ores, copper, unwrought and part wrought, copper wire, alloys and compounds of copper, cork including cork dust.

Corundum, cotton, raw, lintens, cotton waste, cotton yarns, cotton piece-goods and other cotton products capable of being used in the manufacture of explosives, coupons, credit notes, cresol and its mixtures and derivatives, cyanamide.

DEBIT notes, diamonds suitable for industrial purposes.

ELECTRICAL appliances adapted for use in war and their component parts, electrolytic iron, emery corundum, carborundum and all other abrasive materials whether natural or artificial and the manufactures thereof, equipment, explosives, materials used in the manufacture of explosives specially prepared for use in war.

FATTY acids, felspar, ferroalloys of all kinds, ferro-silicon fibres, vegetable and yarns made therefrom, financial documents, flax, forges, field and their component parts, formic acid and formates, formic ether, fusel oil.

GASES for war purposes and materials for production thereof, glycerine, gold, silver, paper money, securities negotiable instruments, cheques, drafts, orders, warrants, coupons, letters of credit, delegation or advice credit and debit notes or other documents, which in themselves or if completed or if acted upon by the recipient authorize, confirm or give effects to the transfer of money, credit or securities, goldbeaters skin, gun mountings and their component parts, guttapercha.

HAEMATITE iron ore, haematite pigiron, hair, animal of all kinds and tops and noils and yarns of animal hair, harness of all kinds of a distinctively military character, hemp, hides of cattle, buffaloes and horses, hydrochloric acid.

IMPLEMENTS and apparatus designed exclusively for the manufacture of munitions of war or for the manufacture or repair of arms or of war material for use on land or sea, incendiary materials for war purposes, insulating materials, raw and manufactured iodine and its compounds, iridium and its alloys and compounds, iron, iron pyrites, kapok.

LATHES, machines and tools capable of being employed in the manufacture of munitions of war, lead and lead ore, leather undressed or dressed, suitable for sadlery, harness, military boots and military clothing, leather belting, hydraulic leather, pump leather, letters of credit, delegation or advice, light producing materials for war purposes, limbers and limber boxes and their component parts, lithium, lubricants.

MACHINES, manganese and manganese ore, manganese dioxide, maps and plans of any place within the territory of any belligerent or within the area of military operations on a scale of 4 miles to 1 inch or any larger scale and reproductions or any scale by photography or otherwise of such maps or plans, mercury metallis, sulphates and thiosulphates, mineral oils, including benzene and motorspirit, molybdenum and molybdenite, monazite sand, motorspirit, motor vehicles of all kinds and their component parts and accessories.

NAPHTHA, naphthalene and its mixtures and derivatives, negotiable instruments, nickel and its alloys, salts, compounds and ore, nitrates of all kinds, nitric acid.

OLEUM, orders, osmium and its alloys and compounds, oxalic acid and oxalates.

PALLADIN and its alloys and compounds, paper money, peppers, phenates, phenol and its mixtures and derivatives, phosgene, phosphorus and its compounds, photographic films, plates and paper sensitized, pitch, platinum and its alloys and compounds, potassium salts, powder, especially prepared for use in war, projectiles, charges, cartridges and grenades of all kinds and their component parts, prussiate of soda.

QUEBRACHO wood, quillaia bark.

RAMIE, rangefinders and their component parts, rattans, resinous products, rhodium and its alloys and compounds, rubber and goods made wholly or partly of rubber, ruthenium, its alloys and compounds.

SABADILLA seeds and preparations thereof, searchlights and their component parts, securities, salenium, silk, artificial, and the manufactures thereof, silk in all forms and the manufactures thereof, silk cocoons, silver, skins of calves, pigs, sheep, goats and deer.

Smoke producing materials for war purposes, soda, lime, sodium, sodium, chlorate and perchlorate, sodium cyanide, solvent naphtha and its mixtures and derivatives, starch, steel containing tungsten or molybdenum, strontium and lithium compounds and mixtures containing the same.

Submarine sound signalling apparatus, sulphur, sulphur dioxide, sulphuric acid, fuming sulphuric acid (oleum), sulphuric ether, male.

## The B/L Collection Bank of Chicago



This bank is particularly well equipped to serve manufacturers, jobbers, wholesalers, and dealers located in States West of Pennsylvania to the Pacific Coast. We offer the facilities of a Chicago checking account with or without a line of credit. Our collection Department is a special feature of this service. We make a specialty of handling Bill of Lading collection items. Correspondence invited.

**Union Trust Company  
CHICAGO**

One of Chicago's old conservative banks doing strictly a commercial business. Established 1869

## First Federal Reserve Trust Company

We believe it is worthy of mention that the first Trust Company in New York to become a member of the Federal Reserve System was the Broadway Trust Company, which joined in August, 1915. To-day this institution still remains the only Trust Company member in the State of New York.

Our deposits on August 1, 1915, were \$20,585,000. On July 1, 1917, they had increased to \$30,868,000.

This growth indicates that our patrons have confirmed our judgment in joining the system, of which all national banks in the country are also members.

**Broadway Trust Company**

FREDERICK G. LEE, President  
Woolworth Building  
New York

## EADS JOHNSON, M. E.

Member: Society Naval Architects and Marine Engineers  
Member: American Society of Mechanical Engineers

**Consulting Engineer and Naval Architect**

Designs and specifications for all classes of floating property. Surveys, Superintendence, Appraisals. Personal attention to all matters.

115 Broadway New York City



TANNING substances of all kinds including quebracho wood and extracts for use in tanning, tantaium and its alloys, salts, compounds and ores, tar, thiosulphates, thorium and its alloys and compounds, tin, chloride of tin, tin ore, titanium and its salts and compounds.

TITANIUM ore, toluol and its mixtures and derivatives, tools, tungsten and its alloys and compounds, tungsten ores, turpentine (oil and spirit), tyres for motor vehicles and for cycles together with articles or materials especially adapted for use in the manufacture or repair of tires.

URANIUM and its salts and compounds, uranium ore,

urea, vanadian and its alloys, salts, compounds and ores, vegetable fibres.

WAGONS, military, and their component parts, war-rants, warships, including boats and their component parts of such a nature that they can only be used on a vessel of war, waxes of all kinds, wire, barbed, wire, steel and iron, wood spirit, wood tar and wood tar oil, woods of all kinds capable of use in war, wool, raw, combed or carded, wool waste, wool tops and noils, woolen or worsted yarns.

XYLOL and its mixtures and derivatives, zinc and its alloys, zinc ore, zirconia, zirconium and its alloys and compounds.

### CONDITIONAL CONTRABAND

ALGAE, lichens and mosses, barrels and casks empty of all kinds and their component parts, bladders, boots and shoes suitable for use in war, casein casings, casks, charcoal, chronometers, clothing and fabrics for clothing suitable for use in war, docks, floating and their component parts, parts of docks, explosives not specially prepared for use in war.

FIELD glasses, foodstuffs, forage and feeding stuffs for animals, fuel, including charcoal, other than mineral oils, furs, utilisable for clothing suitable for use in war, gelatine and substances used in the manufacture thereof, guts, harness and saddlery, horseshoes and shoeing materials, lichens, mosses.

NAUTICAL instruments, all kinds of oils and fats, animal fish and vegetable other than those capable of use as lubricants and not including essential oils, oleaginous seeds, nuts and kernels, powder not specially prepared for use in war, railway materials both fixed and rolling stock, sausage skins, skins, skins utilisable for clothing suitable for use in war, sponges, raw and prepared.

TELEGRAPHS, materials for, materials for wireless telegraphs, telephones, materials for, telescopes. Vehicles of all kinds other than motor vehicles available for use in war and their component parts, vessels, craft and boats of all kinds, yeast.

### Some Welcome Trade Casualties

(Concluded from page 34)

No complete statistics exist as to the amount of merchandise returned and of orders canceled in the course of a year, nor as to the saving that could be effected by reducing the number of styles. From such fragmentary records as we have, however, it is not improbable that the United States manufactures every year \$200,000,000 worth of merchandise more than its needs call for. That figure, which may be far too low, may seem important just now when we are warned to gather up the crumbs of bread that are left after a meal lest they be lost.

After the war, will we return to the old ways of doing business? In answering that question, consider what the fabrication of \$200,000,000 worth of merchandise a year means.

It means the labor of producing great quantities of raw materials, the setting up of factories and the building of machinery to convert that material into manufactured articles. It means the labor of producing fuel to drive the wheels of industry, and the labor of the operatives of factories and of the employees of wholesale houses. It means the building of locomotives and cars and the operating of trains to carry that merchandise. It means the work of the tens of thousands of men and women through whose hands material passes from its raw state to that of a finished product. It means a gigantic job.

It means, over and above all that, the diverting of that amount of wealth and effort from things that would minister to the comfort and well-being of the people. The man who busies himself at a useless task neglects one that is essential.

That is the case for economic business methods in time of peace. In time of war, their adoption becomes a necessity which may be elevated into an act of patriotism.

### Mars on the Line

(Concluded from page 24)

of the courage. But to calmly risk death to string or repair a bit of wire or remedy an outraged mechanism is a test of man's mettle that only modern warfare could devise.

Strange that the need finds men to fill it. War could hardly be carried on now without the telegraph, telephone, wireless, cable and the buzzer system. Wireless is used from the General to the Brigade Headquarters, but cable is used from there to Battalion Headquarters, and along the trenches. Within

the trenches the cable wire is strung along the side hung on pegs.

It is the cable detachment that has the opportunity for showing heroism. The cable must be laid beneath the ground four inches or so in order to prevent its being trampled upon and broken. It is not difficult for a detachment of ten men, eight horses and a wagon to be discovered by the enemy. Most of the work has to be done under fire.

At Mons, Captain Corcoran tells us, a cable detachment went out to repair a unit that had been disabled. A German airplane discovered it and promptly blew it to pieces. A second wagon took its place and shared the same fate. There was no hesitation, however, and a third, expecting nothing better, went out to the task,—and escaped by a miracle. That is about the percentage. One out of three.

Then there is the story of the Hero of Givenchy. The men in the trenches were from three to four hundred yards from support. A wooden peg, invisible even to the air men marked the spot where the telephone wires connecting them with headquarters were bunched about a foot below the surface. Just about dawn a shell from the enemy's guns struck the earth near to the peg and destroyed the junction box. In a second a soldier-miner set out to repair the damage.

Rifle in hand and his appliances in his knapsack, he crept the two hundred yards around a traverse and dropped into a shell hole. The Germans discovered him and kept up a heavy fire. The man worked until he had finished, apparently unharmed. The first word that went over the wire told of the massing of the Germans for attack directly in front of them. There was no time for reinforcements but they made their stand. The Givenchy fight is bloody history.

The telephone-hero was among the missing.

### Triumphant Cotton

(Continued from page 38)

world demand will call for 40,000,000 bales. Will the South hold its own in that advance? It has the soil. The vital labor problem, however, is threatening. The section gets little immigration; thousands of negroes are leaving. Cotton is still "hoed" and "picked" by the methods of a hundred years ago. Production per acre has grown but gathering is as costly as ever. A mechanical cotton-picker would solve the labor question.

It has not yet been decided whether the boll weevil, now infesting five-sixths of the belt, is a passing blight or an enduring pest. Many hold that in being a first-class promoter of diversified farming and intensive cultivation it is proving a blessing in disguise. However, its ravages are terrible.

Whatever may be the industry's value to the section, the South could get along without cotton. Already the staple has been relegated to secondary place in total values. Food-stuffs exceed it and manufactures treble it.

This new independence has enabled the section to make tremendous development, not only along business but social lines also. Between 1900 and 1914 expenditures for public schools increased nearly 350 per cent. The negro, cotton's handmaiden, is sharing in this. Two million negro children attended free schools in 1914.

The South and its cotton are doing their bit; indeed, the bit began three years ago. The war cost the South, indirectly through the demoralization of its markets, more than two billions of dollars during its first two years. But there was little complaint.

After its many vicissitudes, the dangerous forebodings of three years ago, its spectacular course, varying from the farcical to the tragical, it can now be said that cotton has arrived and arrived to stay for quite a while. There may be some question as to what will happen to other things during the reconstruction days of the coming era of peace; there is none as to cotton holding its own. The South, and largely by reason of the South's



great export product, the Nation, too, will be in a position of strategical ascendancy when the guns are silenced and the aroused energies of the world are turned from war to commerce.

### The Case for the Trade Acceptance (Concluded from page 32)

from generations of employment of less soundly scientific methods must be overcome and business men of all classes must be brought to see that the best results are possible only when the business methods employed by them harmonize with national interests as well as with their own.

The trade acceptance has in its favor a good start—simplicity, economy, safety, no quarrel with any sound method in the field, proper distribution and location of responsibility, recognition of prompt business methods and complete harmony with the national interest, and with the Federal Reserve System's efforts towards its protection. Its merit would appear to be conclusive. It should be taken seriously not only in business connection, but as a detail of the war.

No time should be lost in getting its merit before the business of the country. Its relation to the needs of war is intimate and serious. Just as our success in bringing the war to a speedy and satisfactory end will depend upon the energy and aggressiveness with which we treat our fighting units, so will our success in supporting the war and making the action of fighting units effective depend upon the energy and aggressiveness with which we promote the development of the trade acceptance and the other sound commercial expedients.

### Looking Back at the Liberty Loan (Continued from page 19)

These 8,000 small banks reported that the advertising of the \$662,282,694 of bonds they sold cost \$473,571. It was explained by hundreds of them that the cost of the campaign to them could not be even fairly estimated. In many cases officers of banks gave all their time to selling bonds and the employees of the banks gave time outside of banking hours to selling and inside banking hours the bonds and their sale took up much time.

These 8,000 banks had unsold on their hands \$119,113,717 of the bonds when the subscription books closed on June 15. If this proportion extends to all banks approximately \$400,000,000 of the Liberty Loan bonds are owned by the banks. But the banks have continued the sale and it is likely that when the last installment of the loan is paid on August 30, the proportion of bonds owned by banks will be negligible.

Interesting points from this mass of reports from banks are in relation to the next loan. The complaint is general that there were too many commanders, that too much advice was given banks from headquarters and not enough information, that the publicity was badly handled and the advertising badly done.

The expressions of the bankers leave no room for doubt that the making of an organization before the announcement of the loan would modify their difficulties. In thousands of small communities the work did not get under way until a few days before the subscription books were closed.

**P**ERSONAL solicitation was the one great factor in making the loan a success. There was no exception to this anywhere. Publicity, advertising, speechifying, appeals to patriotism, were in every case of small effect unless followed by activity on the part of salesmen, who could present the case to the individual or a group of them, answer questions, voice the arguments and get the signature to the subscription blank. It is repeated innumerable times that the village banker was invariably successful in his quest

for subscriptions. Wherever an organization was perfected, committees formed and well advised plans followed, the result was success.

The evidence that the farmers subscribed in the most limited way is overwhelming. Many explanations for this are given: "They were German farmers," is an expression used and reused. "They don't approve the war," or "They don't understand the situation." Frequently it is said that the season was inopportune and the farmers would be willing to buy bonds when they have sold the crops now growing.

All of this is confirmatory of a conclusion based on experiences in the larger cities. The people are all alike. Those in the cities have all the variations in temperament, predilections and prejudices of those in the country. But they are better informed and more easily reached. That is the war loan proposition in a nutshell. If an organization can be made which will cover the country adequately, if the advertising is standardized and the publicity well ordered and adaptable to varying needs, if the speakers are well trained, any loan can be brought to a speedy success provided enough salesmen competent to define a bond and explain its significance, can be secured to complete the work the advertising, publicity and allied activity has started.

**A**T this time it is probably unfair to say the farmer will not do his share. But the last bond issue was not a rural success in the middle west. One banker writes:

"Only twelve and one-half per cent of the amount was subscribed by farmers although this is a wealthy, productive, northeast corner of Iowa where improved farms sell for \$125 or over per acre. The eighty-seven and one half per cent was subscribed by town people. Farmers seem to place interest rate above patriotism."

How great a part patriotism played can only be guessed. Undoubtedly it was the great moving impulse. Some millions of people bought Liberty Bonds who never bought bonds before. It was patriotism which opened the door to the salesmen and insured them a hearing. But, beyond that, the people had to be shown what a bond is, its significance and standing as an investment, its terms and conditions, what coupons are for, and the use to which it may be put in an emergency.

**W**HEN these questions were all satisfactorily answered, there came the practical one of the safekeeping of the bond and the terms of payment. The farmer was a hard proposition. Not all banks have safe deposit vaults and taking a bond into custody was a business proposition. Some banks did it and some didn't. But everywhere the banks made the purchase of a bond easy. They were generally willing to cooperate with any employer in making it easy for him to get bonds for his employees. The 8,000 banks report 1,703,827 persons as paying for bonds by some partial payment plan.

The experience of these banks may be summarized to show that the first essential to success in war loans is the wide advertisement of the war and its meaning to the people of this country. It is vastly more important to advertise the war than the bonds. The people of the country must be informed and kept informed as well as those in the towns and cities. At present information is difficult to get and is generally badly presented. The tendency is to increase the difficulties.

The other great problem is the making of an effective organization for the sale of bonds. It goes without saying that the expense of advertising should be borne by the government. Here arises the primary difficulty. The allowance to the Treasury for expenses is limited by law to one-tenth of one per cent. For the promised issue of three billions, this is three million dollars. Out of this must be paid the cost of printing and engraving the bonds. Except for this expense, the banks,



## Expediting Freight Shipments

General Joffre says: "*The Battle of the Marne was won by railroad transportation.*" The Commission on Car Service of the Railroads' War Board calls attention to the importance of *Intensive Loading of Freight Cars*. The problem of promoting efficiency in the loading of cars is a mighty live one today to our Allies and our Nation.

The intensive loading of cars, the saving of time, space, labor and freight charges, such is the problem which now confronts all American manufacturers and shippers.

In your solution of that problem we offer the aid of an effective organization of specialists. One which has devoted seventeen years of intensive study to the problem, and possesses a large and successful experience in its most efficient and economical solution.

Send for our Treatise on Modern Shipping Methods, a book which explains in detail the savings secured to you through means of the

## Trans-Continental Freight Company

*A Rational Service of  
International Scope*

Don't waste time and money needlessly. Learn for yourself what the Economies of our Consolidated Car Service mean to so large a number of important manufacturers and shippers. The men who are doing their bit in promoting greater efficiency for the arteries of our nation.

"Foreign Trade Suggestion," the book with a message to the busy executive, free on request. Where shall we send your copy?

## Trans-Continental Freight Company

Woolworth Bldg., New York

General Office, 203 Dearborn St.,  
CHICAGO

Old South Bldg., Boston; Elliott Square, Buffalo;  
Union Trust Bldg., Cincinnati; Alaska Bldg., Seattle;  
Pacific Bldg., San Francisco; Van Nuys Bldg.,  
Los Angeles

A line to the  
nearest office  
will bring the  
facts





## Cheney Cravats

IN high favor with the American business man, whose business judgment extends to articles of personal wear, are Cheney Cravats. This toppy neckwear is identified by the quality-mark

**CHENEY SILKS**

CHENEY BROTHERS  
Silk Manufacturers  
6th Ave. and 18th St., New York



The farmer of today proudly teaches his son what his own father taught him—to use a John Deere Plow.

Ask for Better Farm Implements and How to Use Them. A book that's yours for the asking. Mention "The Nation's Business," please.

DEERE AND COMPANY, Moline, Illinois

Just what you need in a single volume

## IMPORTANT FEDERAL LAWS

Compiled by John A. Lapp, LL.D., Director  
Indiana Bureau of Legislative Information

A Practical and Accurate  
One-Volume Compilation of all the Federal  
Laws that the Business Man Needs

Price, \$6.00

B. F. BOWEN & COMPANY  
711-716 Occidental Bldg., Indianapolis, Ind.

like the business men, are willing to do everything within their power. But the problem is one of organization. The American Bankers Association with nearly 18,000 members has put its organization at the disposal of the Secretary of the Treasury. But the organization arrangements will be properly made by the Treasury through the Federal reserve banks.

Some indication of the financial task before the country is contained in the record that appropriations made and pending for war purposes exceed ten billions of dollars.

## Board and Keep for a Million Soldiers

(Concluded from page 13)

miles to the north. Wagons, for the most part, will disappear for military uses if the supply of gasoline holds out. Since the beginning of the war with Germany, contracts as heretofore stated, have been made for about 24,000 motor trucks. It is believed that three times that number will be required if the war continues for two years. An automobile truck will haul as much freight in a day as will twelve army mules and three wagons.

The methods used during the Civil War to put men on the firing line and to keep them there has been studied by military officers throughout the world. Principles established then and methods adopted then are now followed in Europe and the United States.

The Federal army at Gettysburg, was accompanied by 4,000 heavy wagons, which remained, except those employed in hauling ammunition to the front, twenty-five miles in the rear. General Rufus Ingalls, the great chief quartermaster of the army of the Potomac, said that "wagon trains should never be permitted to approach within the range of the battle-field" but "should be parked in safe and convenient places out of risk and well guarded. Troops," he laid down as a rule of warfare, "should go forward to battle lightly loaded and without wagons except for extra ammunition."

"If the army is successful," he dryly added, "the trains can be brought up very quickly; if defeated, the troops will find an unobstructed road and will get back to the wagons soon enough."

The business side of war at the front, gone undescribed so far, is little understood. There were horse depots at six places during the Civil War; the largest, on a 625-acre farm in the District of Columbia, could take care of 30,000 animals. Sheridan, during his campaign in the Shenandoah Valley, received 1,050 fresh horses a week.

Corrals for beef cattle were established at convenient points. The one at Louisville, Ky., had a feeding capacity of 35,000 a day. A large herd was fed in what have since been known as the monument grounds, just south of the White House. Lincoln could see them any moment of the day.

The principal depots for the purchase and manufacture of clothing were in Boston, New York, Philadelphia, Cincinnati, Louisville, Indianapolis, Detroit, St. Louis and Springfield, Ill. A large pork-packing establishment, operated by army officers, was located at Louisville and immense quantities of hard and soft bread were baked at New York, Baltimore, Cincinnati, St. Louis and other places.

By a law of Congress, the President took possession of and operated nearly 1,800 miles of railroads. All of the employees were placed under military control. Tracks were frequently torn up by Confederates and Federals. The rails were thrown on burning ties so that the heat would twist them out of shape. Sometimes while hot, they were bent around large forest trees.

A Federal rolling mill at Chattanooga straightened the rails at a cost of \$50 a ton. The price of new rails then, and iron ones, at that, was \$145 a ton. Confederate soldiers, in the autumn of 1863, destroyed the twenty-

two miles of railroad between Bull Run and Brandy Station. The Federals rebuilt the bridge (which was 625 feet long and 35 feet high) over the Rappahannock River in nineteen working hours.

Quartermasters, as has been said, arrange for the transportation of armies, either on land or by water. It required 400 steamers and sailing ships to carry the 125,000 men, 14,529 animals, 44 batteries of artillery and the wagons and ambulances constituting the army of the Potomac to Fortress Monroe.

The greatest military depot ever established up to that time was located at City Point, the secondary base for Grant's army, during the final operations against Richmond. There were docks for every arm of the military service. Immense storehouses were erected. Nearly 200 vessels were constantly going and coming in the harbor. A modern railway trainload of hay and grain was received daily. Government ovens baked mountains of bread.

No business in this country, up to that time, had ever been so large, so varied or so energetically or ably performed. Quartermasters, invisible but ubiquitous, did as much as the officers of the line to bring about the collapse of the Confederacy at Appomattox. When the war was over, the quartermaster, whose achievements are still being studied everywhere, built up and managed great enterprises of peace.

More wonderful things are being done in 1917 than were dreamed of in 1861. And the business lessons now being learned, as was the case with the lessons learned more than a half century ago, will increase the prestige and prosperity of American people in the days to come.

## The Men Behind the Army and Navy

(Continued from page 10)

from compensation. Compensation is at the rate of about seven per cent, and the overhead expenses of such contracts are from three to four per cent.

While contracts for materials were let by the various contractors, arrangements had already been made by the government for most of the material required. Every effort was made to prevent competition in purchasing between the contractors, and for important material all that remained for the general contractors to do was to execute formal contracts on options held by the government.

Notwithstanding the large number of contracts and the amounts involved, arrangements have been made that those selling to the government be paid more promptly than is the practice in general business. It is recognized that on the contracts being placed for war materials and supplies large amounts of working capital are required, and the government desires to assist in keeping these requirements at a minimum by making payments without delay.

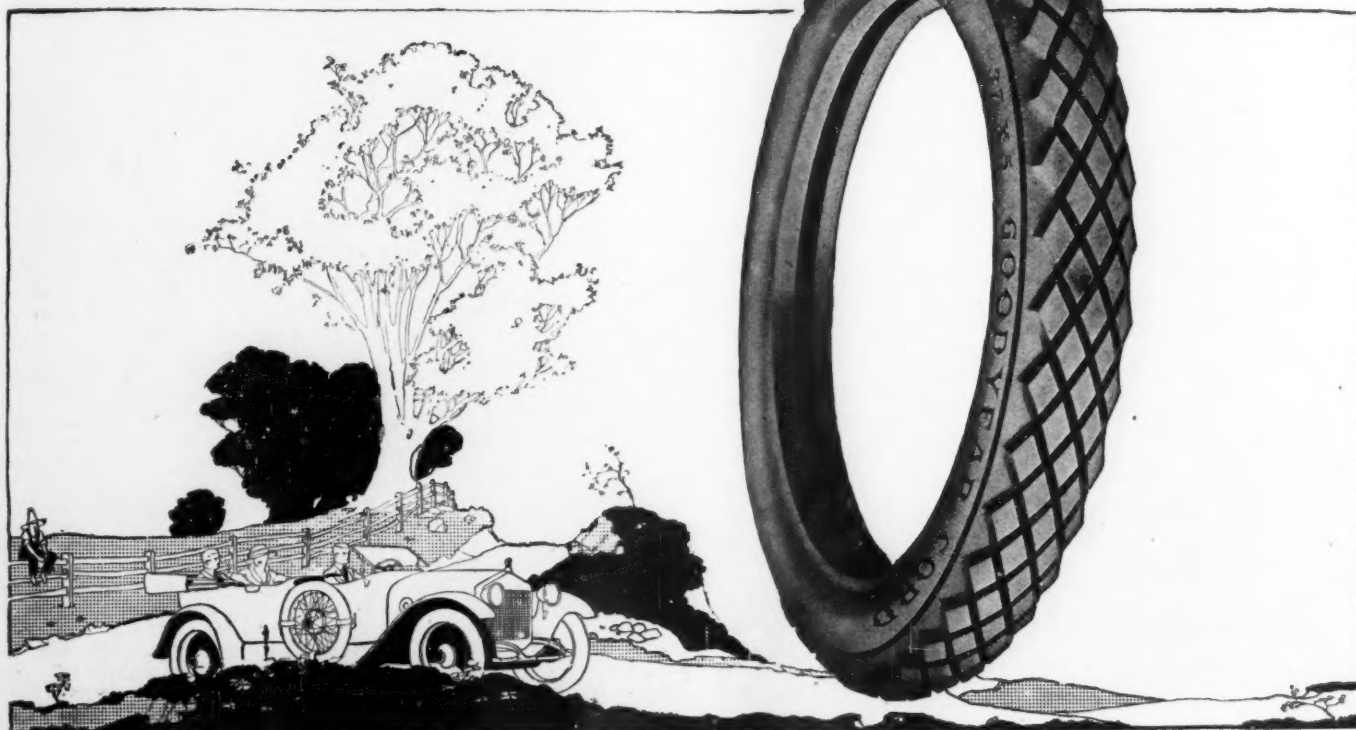
THE Commercial Economy Board of the Council of National Defense wants the help of business men in its endeavor to prevent lost motion in commerce. Men and materials can thus be released for the war and demands upon important business operations reduced. The Board is determining the activities of commodity distribution which are unessential, and cooperating with business men to avoid this waste in time of war.

In practically every trade there have grown up nonessential services which are a source of serious dissipation of materials and manpower. Returns of bread and other commodities from retail stores are twin evils to duplication of retail delivery service and unnecessary styles.

Savings may be effected in many lines of business. During war, business cannot continue to render the elaborate service possible in time of peace. In order that national energy may be directed first toward prosecuting the war, commercial activities must be reduced in many directions. In every line



Goodyear Tires, Heavy Tourist Tubes and "Tire Saver" Accessories are easy to get from Goodyear Service Station Dealers everywhere.



## They Add Real Comfort to Any Car

One of the most important elements in the satisfactory use of any automobile is comfort.

In the past this important element has been relatively neglected—car makers necessarily focused their ingenuity and resource on the perfection of mechanical parts.

But today, with the ability and usefulness of the motor car firmly established, vast effort is being given to magnify riding ease.

In this direction, which now invites the entire automobile industry, Goodyear Cord Tires represent a tremendous forward step.

For Goodyear Cord Tires positively do enhance the comfort of any car.

Goodyear Cord Tires add comfort to the hardest-riding car. And Goodyear Cord Tires add comfort to the easiest-riding car.

Whether on boulevards or in the country, on ballasted highway or difficult mountain trail, they smother

shock, defeat vibration, absorb impact, lessen spring-throw, insure smooth travel.

For the man who uses them, the world is covered with velvet.

The resilience and life of Goodyear Cords are due directly to their construction.

This construction, originated by Goodyear, supplants the inactive, tightly cross-woven fabric ordinarily used in the tire body, with thousands of stout, pliant cords.

Layers of these cords are built diagonally one upon the other, *without interweave*, and each cord and each layer separately is insulated and upholstered with a cushion of quick rubber.

In action these cords play freely in the tire, without contact and without friction, exercising swiftly to the lift and dip of the road, and yielding extreme comfort.

See how these top-grade car

makers have recognized this virtue and have sanctioned it:

Goodyear Cord Tires are standard equipment on the Packard Twin-Six, the Franklin, the Locomobile, the Peerless, the White, the Haynes Twelve, the Stutz, the McFarlan, the Roamer, the Lexington Thoroughbred Six, the Daniels Eight, the Owen Magnetic, the Mercer, the Milburn Electric, the Detroit Electric, and the Rauch and Lang Electric.

Comfort alone was not of course the sole basis for their choice, but comfort had an important part.

It will have an important part in the satisfaction you derive from them. However much you may appreciate their long life, economy, appearance and stamina—you will not the less appreciate the ease-of-riding Goodyear Cords insure.

Their quality makes them higher-priced and—*better*.

The Goodyear Tire & Rubber Company  
Akron, Ohio

**GOODYEAR**  
AKRON  
**CORD TIRES**

Our business has been  
built on this one rule

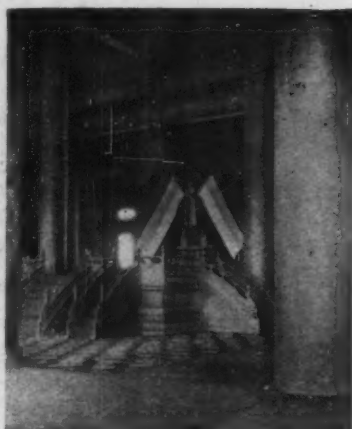
**Right Quality**  
at  
**Right Price**

**T**HAT this policy is  
fundamentally sound  
is evident from our  
continuous rapid growth de-  
cade after decade.

Real cost saving is what you  
accomplish when we supply

**Solder**  
**Babbitt**  
**White Metal Alloys**

**Marks Lissberger & Son, Inc.**  
LONG ISLAND CITY, N. Y.



Republican Flags over the Manchus Throne. Recently the Manchus retook it. Now the Republic is again restored.

**"The Republic Survives"**

is Frederick Moore's clear description of the recent failure to reseat the Boy Emperor. It is in

**Asia**  
for August

Also in August: Richard Washburn Child's  
"Chinese Trade Unions"

—a continuation of his inquiry into Chinese business ways.

If you as an American business man hope to benefit by the big modern Chinese development promised after the war, you cannot afford to miss a single issue of ASIA now.

American Asiatic Association,  
230 Madison Avenue, New York City.

I wish to become an Associate Member and to subscribe to ASIA, Journal of the American Asiatic Association.

Name .....

Address .....

Associate Membership dues \$2.00, of which \$1.75 is for one year's subscription to ASIA.

of business, men must consider what activities or services can be dispensed with during the war. If this is to be done gradually and with due regard to supplies of materials and finished product already on hand, business men must act at once.

The readjustments suggested have been made in other countries at war, and sometimes they have been made suddenly and drastically, affording no opportunity to avoid loss. If we act promptly, we shall have time to do these things deliberately and without throwing the machinery of trade out of balance.

**T**HE assistance rendered by the Supply Committee of the Council of National Defense in connection with government purchases of shoes, cotton duck, and canned goods furnishes excellent examples of what is being done by business men associated with the Council of National Defense.

The usual procedure of the War Department, based on the purchase of 250,000 shoes at one time, might not, it was felt, be the best when these purchases increased to several million shoes. The Quartermaster's Department therefore consulted the Supply Committee for advice on the new problem. The Committee's investigation showed that there was not enough leather of the required grades in the country for such an order as was contemplated, and that to have shoe manufacturers competing with each other to secure options on the limited stock of leather available would sharply advance prices and cause the government to pay more for shoes.

Therefore, before the government undertook to make its purchase, the Supply Committee conferred with packers and secured the understanding that when the leather manufacturers entered the market for hides required for the government's needs, the prices on hides should be no higher than those prevailing when war was declared,—prices lower than those prevailing at the time the conferences were held.

The Committee then met with the manufacturers of leather, who on their part agreed that when the shoe manufacturer came to buy leather, the prices should be no higher than when the war began. These prices also were lower than those prevailing at the time this agreement was entered into. Similar understandings were also secured on linings, eyelets, tacks, nails, thread and so on.

The War and Navy Departments then asked for bids on shoes. Each of 84 manufacturers was asked to bid on all that he could supply before November 30, 1917, and he was told of the options on leather and other materials. He was also told that he could buy these materials wherever he pleased and as cheaply as possible, but could have the benefit of the guaranteed prices if he desired.

It took the bids of 20 manufacturers to fill the requirements of the government. Their tenders were so low that additional orders in anticipation of future requirements were also placed. The importance of the arrangements made by the Supply Committee for raw materials will be understood when it is known that the total of all bids submitted was 9,880,000 shoes.

In purchasing 12.4 cotton duck and shelter duck, a different situation was met and overcome. All existing facilities for producing these cotton ducks were unequal to the government's needs. New sources of supply had to be developed, and the experts of the Supply Committee concluded that carpet and other manufacturers could produce suitable ducks if their looms were changed and the government requirements somewhat modified.

The carpet manufacturers insisted that the committee's suggestion was out of the question and that cotton duck could not be manufactured on carpet looms. The loom manufacturers said the same thing. The committee insisted, however, the plan was put to the test, and it has been found practicable and entirely successful. Thus the Army has

a new and large additional source of supply of a very necessary material.

The manufacturers of fabric for automobile tires have been developed in the same manner into another source of supply, and other industries are also making cotton duck for the government.

Still another means of helping the Quartermaster's Department was developed in connection with the purchase of meat. There were apparently unnecessary delays in securing such supplies and the prices appeared higher than on commercial products. The Supply Committee therefore arranged a conference in Chicago between War and Navy Department representatives and meat packers for the purpose of bringing the government's specifications and requirements more into accord with prevailing business conditions. Many changes in specifications resulted from the free discussion which took place, and better deliveries and better prices are therefore anticipated.

The Army has heretofore required a can of corned beef to weigh 32 ounces. To supply this, a special can has been manufactured by hand at great expense and in limited quantities. The commercial can contains 24 ounces and is made in large quantities by machinery at low cost. The investigation by the Committee brought out this fact and the War Department promptly recognized the desirability of accepting 24-ounce cans.

As an example of how business men are responding to the suggestions of the Supply Committee, take the case of the canners.

When the government learned that it would be necessary to buy canned peas for a million men, the estimated pack for this year, in accordance with the custom in the trade, had all been sold to the wholesalers. The committee called a meeting at which all canners were represented. They were told that the government would need 12 per cent of the expected pack, and, at the request of the committee, the canners undertook to reserve this percentage of each producer's output for the government. They also agreed that prices should be determined by the Division of Costs and Accountancy of the Department of Commerce when the packing season ended and the size of the crop and costs were known, and that they should be what the Department regarded as "fair and just" prices.

Then the committee secured the consent of jobbers and other buyers of canned peas to the deduction of the 12 per cent on all contracts. Thus the Army is to receive its full supply of canned peas at fair prices and without delay.

**H**ERE we have a graphic picture of war-time relations between business and government. We see government, as the greatest buyer in the world, entering into competition with private traders, taking from them goods for which they have contracted, absorbing all visible supplies of given commodities, curtailing private use of transportation facilities. We see government, as a customer of business, forcing down prices, upsetting trade arrangements, making over business practices to suit its own ends.

Then we see business, cheerfully falling in with every plan of government, giving up profits that the Army may be fed, adjusting its operations to meet its diminished resources. We see it reducing its activities that men may be spared for the trenches and foregoing improvements and expansion that materials may not be withdrawn from military uses. We see it pinched in every way.

We see government, the benevolent autocrat, and business, the willing handmaid.

**To Our Readers**

**I**F you have found THE NATION'S BUSINESS informative and entertaining you will do your business friend a favor by taking advantage of the special introductory offer set forth on page 1 of this number.